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1986 FORECAST ISSUE

J. P. Crary and S. H. Hymans

The U.S. Economic Outlook for 1986-87

F. Thomas Juster

Gramm-Rudmanizing the Economy

Richard T. Curtin

1986 Prospects for Consumer Demand:
Diminished But Still Favorable

Paul W. McCracken

The 1986 Economy

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EDITOR'S NOTE:

ECONOMIC OUTLOOK USA is designed to aid private and public decision makers in achieving a better understanding of the economic and social environment in which they will be operating. The analysis of this publication incorporates direct measurements of the expectations, attitudes and plans of both consumers and business firms with the economic and financial variables traditionally used in forecast models. The philosophy of this publication is that a blend of anticipatory and traditional measures provides richer insights into prospective developments, insights which will produce more consistently reliable forecasts of both economic and social change.

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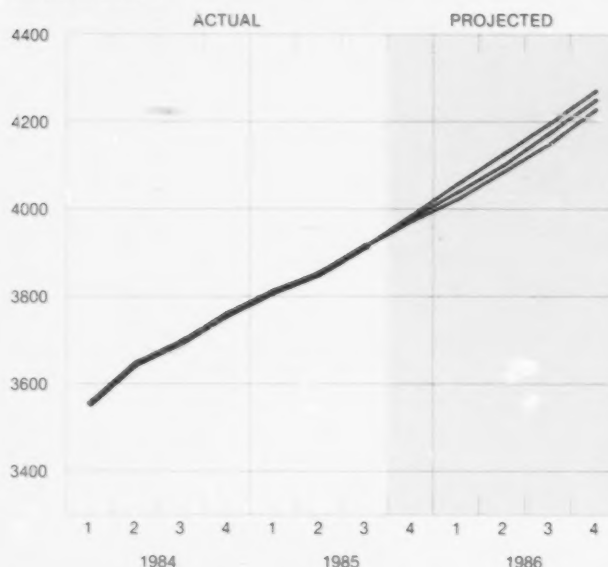
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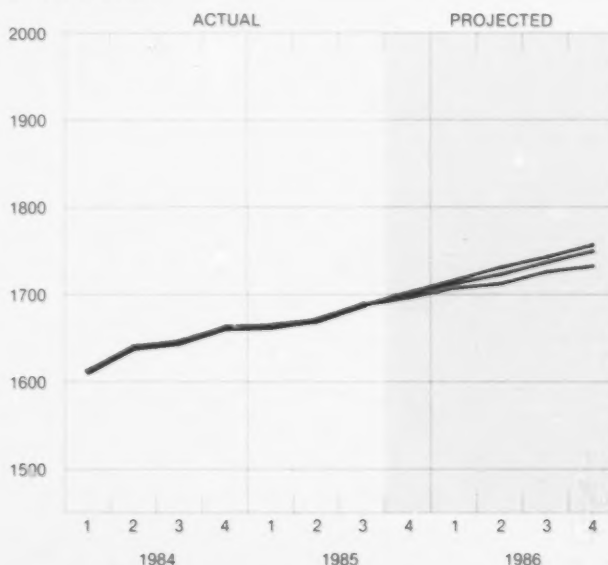
IN CURRENT DOLLARS
Billions of Dollars



Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

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Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

The U. S. Economic Outlook for 1986-87

Joan P. Crary and Saul H. Hymans
Research Seminar in Quantitative Economics
The University of Michigan

Review of the Forecast for 1985

One year ago we predicted that real GNP would grow by 3.8 percent for calendar 1985, a considerable step-down from the preceding year in which real GNP had posted a growth rate of 6.8 percent. The data now available for the first three quarters of this year and our current forecast for the closing quarter of the year indicate that real GNP will grow by a mere 2.4 percent for calendar '85—a good deal less than we had predicted. In terms of 1972 prices this translates into an increase of only \$40 billion compared to the \$62 billion which we had forecast.

When a GNP forecast proves to be substantially correct, it is tempting to avoid looking at too much of its detail lest

Editor's Note: This is a slightly edited version of Dr. Hymans' presentation to the 33rd annual Conference on the Economic Outlook at The University of Michigan, November 1985.

it reveal that the accuracy in the total reflects a serendipitous cancellation of large component errors. Over the years RSQE forecasters have stuck tenaciously to the principle that such a temptation had to be resisted. Occasionally, adherence to the principle has indeed taken some of the luster away from an accurate bottom line. It is equally important to look at the detail this year—either to discover why we made a pretty good-sized error last year, or to find that some aspects of the forecast weren't all that bad, or some of each. The main aspects of last year's forecast are reviewed and evaluated in Table 1.

The sense in which we were globally correct a year ago was in the understanding that economic growth was not going to continue for 1985 at the enormously rapid pace experienced during 1983-84. There was nothing unique, however, about our wisdom on that score. The conventional wisdom of a year ago also indicated a slowdown for 1985. Indeed the consensus of the forecasts contained in the Eggert

TABLE 1. Review of RSQE Forecast for 1985¹

Economic Indicator	1983-84 Actual ¹	1984-85					
		Calendar Year		1st Half, 1984:4-85:2		2nd Half, 1985:2-85:4	
		Predicted ²	Actual ³	Predicted ²	Actual ³	Predicted ²	Current RSQE Estimate ³
Changes:							
<i>Real GNP and Components (Billions of 1972 Dollars)</i>							
Gross National Product	104.6	62.3	39.9	30.6	8.9	41.9	26.2
Personal Consumption Expenditures	53.2	41.2	42.0	21.3	26.7	20.6	9.2
Durable Goods	20.5	9.3	13.0	5.3	7.2	6.0	-2.1
Nondurables and Services	32.6	31.9	29.0	16.0	19.4	14.6	11.4
Business Fixed Investment	33.9	20.5	12.6	9.2	6.5	7.0	-1.3
Residential Construction	6.5	3.0	1.7	1.6	1.7	4.4	3.1
Inventory Investment	28.4	-10.1	-14.1	-7.5	-8.5	1.7	9.3
Net Exports	-27.6	-6.9	-17.8	0.6	-20.4	2.6	-1.4
Government Purchases	10.2	14.7	15.6	5.4	3.0	5.7	7.2
<i>Wages, Prices, and Productivity (Percent Changes at Annual Rate)</i>							
Hourly Compensation (Private	4.2	5.4	3.9	6.1	4.1	5.8	3.7
Price Deflator Nonfarm	3.3	3.6	3.8	3.5	4.1	4.0	3.3
Productivity Sector)	2.7	2.1	0.2	2.3	-1.1	2.9	1.4
Exchange Value of U.S. Dollar	10.4	1.5	4.1	-2.1	2.5	-5.3	-23.7
Level in Terminal Year or Quarter:							
Civilian Unemployment Rate (%)	7.51	7.25	7.25	7.35	7.31	7.04	7.20
3-Month Treasury Bill Rate (%)	9.52	8.81	7.50	8.75	7.46	8.68	7.25
Corporate Aaa Rate (%)	12.71	11.81	11.47	11.90	11.63	11.47	10.97
Personal Saving Rate (%)	6.07	5.42	4.07	5.53	5.10	5.27	3.78

¹Based on data published by U.S. government agencies.

²RSQE forecast released in November 1984.

³First three quarters of 1985 based on published data; fourth quarter of 1985 as estimated by RSQE in November 1985.

Blue Chip Report of last November came out at 3.3 percent growth for 1985, which turns out to have been half a percentage point closer to the apparent outcome than our own forecast.

The major error component in our GNP forecast of a year ago is readily apparent from the data in Table 1. We predicted a \$7 billion (1972 prices) deterioration in our real net export balance for this year; it appears now that real net exports will be down by about \$18 billion for the year—an error of \$11 billion, which amounts to half of our total miss in real GNP. Another reflection of our error in forecasting developments in the foreign sector is visible in our exchange rate forecast. Measured against a trade-weighted average of foreign currencies, the U.S. dollar appreciated by 10 percent between 1983 and 1984 following 7.6 percent and 13.8 percent rates of appreciation in the preceding two years. A year ago, we believed that the dollar *had already peaked* a few months earlier, and that proved to be quite wrong. After flattening out briefly in the late fall of last year, the dollar resumed its upward course in the closing months of '84 and peaked in February of this year at more than 9 percent above its level of only three months earlier. This substantial further strengthening of the dollar was accompanied by another sharp drop in our real net export position from an average deficit of 20 billion 1972 dollars (annual rate) in the second half of 1984 to 31 billion 1972 dollars in the first half of this year.

The only other big error we made in last year's GNP forecast was an \$8 billion over-estimate of the year's increase in real business fixed investment. In all other major categories of real GNP, our forecast was extremely accurate. We were within one billion each of the increases in total real consumption and real government purchases, within \$1½ billion on real residential construction, and within \$4 billion on real inventory investment. Those margins of error we'll take any day. We were also exactly correct in our forecast of the civilian unemployment rate, which we had pegged at an average of 7¼ percent for the year.

The irresistible question, of course, is how we could have been about half-again too high on the growth of total production and, simultaneously, right on the mark with respect to both the unemployment rate and total consumer purchases. With respect to the former, the answer lies in part in the behavior of productivity. For the year as a whole, the economy has experienced virtually no increase in output per hour of labor input, and even the small growth experienced in aggregate output was therefore accompanied by an increase in employment. There is also a bit of an arithmetic fluke in the annual averages of the unemployment rate for 1984 and 1985. By the end of last year, the civilian unemployment rate had already fallen to 7.1 percent. It jumped to 7.3 percent early this year in response to the slowdown in the rate of economic growth, and remained at that level through July. In recent months, as the growth of economic activity has begun to recover, the unemployment rate has again slipped a bit below 7.3 percent. The real unemployment story for this year amounts to some lost ground compared with where we already were a year ago.

As for our accuracy in predicting consumer purchases, this is primarily the reflection of a generally up-beat household sector which reacted to a slowdown in income growth by consuming an unusually high proportion of its disposable income—yielding a saving rate of 4.1 percent this year compared with 6.1 percent in 1984. Some of this

behavior is explained by far more favorable credit conditions this year, with interest rates in general dropping by a good deal more than we had predicted, and with the domestic automobile companies offering special incentive rates to their customers during the latter part of the year.

The analysis of last year's forecast is completed in the last two pairs of columns in Table 1, which compare actual and predicted values separately for the first and second halves of this year. The basic conclusion is that our major error in predicting foreign sector developments occurred early in the forecast period, and that threw our forecast off for the balance of the year in ways that are easily understood after the fact. Suffice it to note that the economy at year-end '85 is better off in some respects and worse off in other respects than we had anticipated a year ago. It is important to try to understand the present state of the economy and the factors currently acting on that state, for these comprise the initial conditions which will shape the near-term outlook.

The Current State of the Economy: Autos and Inventories

The business and financial press is nearly as confused today as it was just three years ago. At that time it wasn't quite sure whether the 1981-82 recession was over; one day yes, the next day no. Today's confusion refers to whether we've really seen the end of the U. S. growth-fizzle of 1984-85. The almost-daily release of economic data of varying vintages and degrees of reliability provides a bewildering array of economic indicators. And the signals yielded are the least consistent precisely during phases of economic transition—precisely when we all need the most help in trying to separate out information about *where we've been* from that about *where we're heading*. An econometric model, at least, has the virtue that it is a logical statement about how different variables interact and fit together. The model can be wrong because it is necessarily only a crude approximation to reality and at some times is a better approximation than at other times; but it's never at a loss for an inability to weigh and sort contradictory data. The current state of the economy—as revealed by the logic of the Michigan Quarterly Econometric Model of the U.S. Economy—is shown by the forecasts for 1985:4 and 1986:1 summarized in Table 2. Obviously this forecast represents the model's joint reaction to initial conditions and input assumptions, and we have not yet discussed the latter. But, barring *very sharp* movements in input variables, the economic outlook for the very near term of a quarter or two is *primarily* the result of the economic forces already set in motion by recent economic behavior and events.

The highly publicized growth upswing of 1985:3 is evident in Table 2, which shows that real GNP growth rates of 0.3 percent (annual rate) and 1.9 percent in the first two quarters of this year were followed by a rise to 3.3 percent in the third quarter.* Notice, however, that real final sales have displayed an even greater amplitude swing—from a slight drop in the first quarter of this year to a near 6 percent growth rate in the third quarter, while inventory behavior turned from *accumulation* in 1985:1 to *decumulation* in 1985:3. We are forecasting that real GNP growth will come in at about 3 percent this quarter—basically little different from the 3.3 percent estimated for 1985:3—and

*This figure was subsequently revised by the Commerce Department to 4.3 percent.

TABLE 2. RSQE Forecast, 1985:4-1986:1¹

Economic Indicator	Quarters					Calendar Years		% Change
	1985:1	1985:2	1985:3	1985:4	1986:1	1984	1985	1984-85
<i>Real GNP and Components (Billions of 1972 Dollars)</i>								
Gross National Product	1663.5	1671.3	1684.8	1697.4	1707.2	1639.3	1679.3	2.4
(% Change, Annual Rate)	(0.3)	(1.9)	(3.3)	(3.0)	(2.3)			
Inventory Investment	19.1	8.3	-2.1	17.6	12.2	24.8	10.7	—
New Autos Component	7.6	-3.4	-8.5	5.7	-0.1	1.3	0.4	—
Final Sales	1644.4	1663.0	1686.9	1679.9	1695.1	1614.5	1668.5	3.3
(% Change, Annual Rate)	(-0.3)	(4.6)	(5.9)	(-1.7)	(3.7)			
Personal Consumption								
Expenditures	1089.1	1102.1	1115.2	1111.3	1121.7	1062.4	1104.4	4.0
Durable Goods	187.0	190.1	199.2	188.0	191.7	178.0	191.1	7.3
Business Fixed Investment	213.0	220.3	217.7	219.0	222.3	204.9	217.5	6.2
Residential Construction	60.0	60.9	62.5	64.0	65.4	60.2	61.9	2.8
Net Exports	-28.4	-33.8	-34.0	-35.2	-35.6	-15.0	-32.9	—
Government Purchases	310.7	313.5	325.5	320.7	321.3	302.1	317.6	5.2
<i>Price Changes (% Annual Rate)</i>								
Private Nonfarm GNP Deflator	5.5	2.8	3.1 ²	3.5	3.2	3.3	3.8	—
Exchange Value of U.S. Dollar	27.7	-17.7	-22.0	-25.4	-16.3	10.4	4.1	—
Civilian Unemployment Rate (%)	7.32	7.31	7.17	7.20	7.25	7.51	7.25	--
3-Month Treasury Bill Rate (%)	8.18	7.46	7.11	7.25	7.09	9.52	7.50	—
Auto Sales (Millions of units)	10.84	10.91	12.46	9.58	10.16	10.39	10.95	5.3

¹Data for 1984 and first three quarters of 1985 are based on official agency publications, except as indicated. Data for 1985:4, 1985, and 1986:1 are the current RSQE Forecast.

²RSQE Forecast.

that the growth of production will slip to about 2.3 percent for the first quarter of next year. Final sales growth, on the other hand, is forecast to drop sharply in the current quarter and then to reaccelerate in the opening quarter of next year.

In other words, we've recently been going through an inventory gyration, and it's not quite over yet. As the economy's growth rate moderated in late '84 and early '85—and in particular as U.S. demand for imports continued to be exceptionally strong—U.S. production for inventory accumulation turned progressively weaker. The inventory gyration was exaggerated in the third quarter when the domestic auto companies—following both a growing influx of foreign cars with the virtual abandonment of import restraints, and the 3-week car-haulers strike—elected to use substantial financing incentives to raise traffic levels in domestic auto showrooms. The result—in a car market that was pretty strong to begin with—was new car sales at an annual rate of nearly 12½ million units in 1985:3, the top sales quarter on record! Concurrently, as production lagged far behind the record sales, the stock of new cars available for sale dropped sharply in the third quarter and held the growth of real GNP well below the auto-dominated growth of real final sales. Despite the current availability of financing incentives attached to certain '86-model cars, auto sales are expected to be down sharply in the current quarter—not especially low compared with a normal sales period, but well off the record pace of the third quarter—and this is a good part of the reason for the slide in final sales predicted for this quarter. At the same time, however, current auto production is running ahead of current sales, which will produce an accumulation of cars in stock and a sharp temporary

bulge in inventory investment, which in turn can be expected to be largely reversed in the first quarter of next year.

The Current State of the Economy: The International Side

The auto-related gyration in demand and production is a matter of transitory economic impact. Of far more fundamental importance is the set of factors accounting for the impact of foreign sector developments on the domestic economy. The persistent and substantial strengthening of the U. S. dollar in the international currency market from the time of the 1981-82 recession to the early months of this year produced a real "hit" on the domestic economy—especially so during the two years from early 1983 to early 1985, as we analyzed in some detail in our August forecast release.

In comparison with the average quarterly drop of \$6½ billion in real net exports between 1983:1 and 1985:1, the real net export pattern shown in Table 2 between 1985:2 and 1986:1 is positively benign. The principal reason, of course, is the long-overdue depreciation of the U.S. dollar which finally took hold about eight months ago. If the dollar continues its decline about as we are predicting during this quarter and next quarter, it will stand in 1986:1 at a level 20 percent below its quarterly peak of exactly one year earlier. This will at least have set the stage to permit domestic production to maintain approximately its current share of domestic demand—a far cry from continuing to lose share to foreign production, which has been the pattern of the past several years.

To summarize to this point: yes, the economy really is emerging from the growth doldrums which set in during the latter part of '84. And although the domestic economy has taken a major hit from the impacts of the long-strong dollar, conditions on the international side appear to have turned in favor of the domestic economy relative to the conditions that had prevailed during the past few years.

What matters most, of course, is whether the initial conditions which have, on balance, now turned more favorable will remain so. And here we come to the need for a careful consideration of input assumptions, especially those having to do with our own actions regarding fiscal and monetary policy.

Input Assumptions

We and many others have by now said the following so often that it's becoming trite. But until it's no longer a problem, we have to keep repeating ourselves. The Reagan administration, with the initial acquiescence of the Congress, unbalanced the devil out of the federal budget. The administration remains the core of an ever-more-exclusive club which refuses to recognize the long-term danger of a federal budget sufficiently unbalanced that the growth of interest payments makes it increasingly more difficult to get control of the budget deficit.

While the Congress has been unwilling to buck the tide of presidential popularity and legislate the tax increases which will ultimately be needed to gain permanent control over the budget, it has played the only game in town when it comes to feasible fiscal responsibility. Over the four-year period from FY 1981 to FY 1985, federal government expenditures, excluding unemployment benefits and interest on the federal debt, rose by 8 percent per year on the average. If that spending path were to continue in fiscal '86, this expenditure sub-total would be up by nearly \$64 billion, instead of the \$19 billion—or about 2½ percent—which we expect on the basis of the budget compromise passed by the 99th Congress this summer. Such a step-down in the growth of "controllable" federal spending is no mean feat and represents an enormous Congressional achievement. And although it may well be feasible to keep federal spending on such a low growth track for the next year or two, it hardly seems politically feasible to be able to do so for much more than that—barring the ability to produce a really major saving in the defense budget. Our assumptions about *federal spending for fiscal years 1986 and 1987* are shown in Table 3. Consistent with recent Congressional actions, our Control Forecast embodies an increase of about \$30 billion in total federal spending for fiscal '86, followed by an increase of about \$37 billion in fiscal '87. The major reason for the larger spending increase in fiscal '87 is that we have allowed for a resumption of federal government pay raises in fiscal '87, following the pay freeze contained in the budget for fiscal '86. In our budget assumptions defense spending is on a 5 percent growth path, exclusive of the fiscal '87 pay increase.

On the revenue side of the federal budget, our Control Forecast contains no tax actions aside from those already scheduled under existing law. In the context of our Control Forecast these budget assumptions imply the federal revenue and deficit forecasts shown at the bottom of Table 3. For fiscal '86 we are forecasting a federal deficit of about \$173 billion on an NIPA basis. On a unified budget basis this would imply a fiscal '86 deficit of some \$3-5 billion over

TABLE 3. Federal Government Expenditures and Receipts (National Income and Product Accounts, billions of dollars)

Expenditures, Receipts, and Deficit	Actual Fiscal 1985 ¹	RSQE Projections	
		Fiscal 1986 ²	Fiscal 1987 ²
Total Expenditures	943.3	973.8	1010.8
Purchases of Goods and Services	326.7	340.2	355.5
National Defense	239.9	255.8	271.1
Nondefense	86.8	84.4	84.4
Transfer Payments	368.4	382.1	396.8
Unemployment Benefits	16.2	15.4	15.3
Grants-in-aid to State and Local Governments	97.6	93.8	91.0
Net Interest Paid	130.3	142.3	155.5
Subsidies Less Current Surplus of Government Enterprises	20.4	15.5	12.0
Total Receipts	749.7 ³	800.6	851.1
Deficit (-)	-193.6	-173.2	-159.7

¹Data for Fiscal 1985 are from the *Survey of Current Business*, October 1985.

²RSQE projections and Control Forecast for fiscal years 1985 and 1986.

³The receipts and deficit components for 1985:3 are RSQE projections.

the \$180 billion target which had been proposed in the Gramm-Rudman bill. Our implied fiscal '87 NIPA budget deficit of about \$160 billion, however, is down only about \$13 billion from that of fiscal '86, a good deal less than any of the target reductions being discussed in the Congress. We shall return to this issue in our discussion of the implications of alternative budget paths.

Most economists would cite high U.S. interest rates—especially relative to expectations about the rate of inflation—as a predictable and visible consequence of permanently large structural budget deficits. These high interest rates, in turn, make dollar-denominated assets a relatively attractive investment and thereby cause the dollar to ride high in the international currency markets. The strong dollar then facilitates importing by U.S. residents and weakens our ability to export, and it thereby implies a deteriorating trade balance and, ultimately, a weakness in domestic production relative to the aggregate demand of domestic residents. The strength of this inverse relationship between the value of the dollar and the real trade balance is graphically illustrated in Chart 1, which covers the period from 1975 to the present. The trouble is that many of the recipients of this sound economic argument look at market interest rates, find them sometimes high and sometimes—like the present for example—relatively low, and wonder whether the economists aren't just "crying wolf" and grossly exaggerating the de facto evils of large permanent budget deficits. There is, of course, nothing in the basic argument that implies *either* that interest rates stop responding to market forces, *or* that Federal Reserve actions no longer have any impact on interest rates, in the presence of a large structural budget deficit. The effect of the budget deficit is to produce an interest rate path that is higher, *on the average*, than would otherwise be the case under any given overall economic scenario. It is the average level around which interest rates will fluctuate in response to basic market factors and Fed

actions that is pushed up by the structural budget deficit. In addition, one would also expect that the Fed would, *on the average*, be pursuing a tighter monetary policy than would be the case in the absence of the structural budget deficit. The Fed, in other words, would be relatively more often in the position of trying to lean against the potential inflationary pressures that could develop from the relatively stimulative fiscal policy which is generating the structural budget deficit.

The fiscal imbalance therefore complicates the conduct of monetary policy. Some of this can be seen in the data contained in Table 4, which summarizes the relationship between monetary policy and interest rate movements from late 1982 to 1985:3. During the first half-year of recovery from the 1981-82 recession, the Fed allowed the monetary base to grow in line with total national expenditure (nominal GNP). After mid-'83, once it was clear that the economic recovery was firmly in place, the Fed began to reduce the rate at which it was providing liquidity to the banking system and, over the next year, allowed a progressively larger gap to develop between the growth of national expenditure and the growth of the monetary base. Between mid-'83 and mid-'84, the combination of rapid economic growth and an increasing liquidity squeeze resulted in a rise of nearly 150 basis points in the 3-month treasury bill rate. This sharp rise in interest rates subjected the domestic economy to a "double-hit": the usual deterrent effect of rising interest rates on economic activity, *plus* the effect of high interest rates on the value of the dollar, which continued to appreciate substantially over the same period. Expenditure growth then dropped markedly after mid-'84, and the Fed moved to close the gap between the growth of national expenditure and the monetary base. This process accelerated early this year as Fed officials began to express increasing concern over the mounting problems of the export- and import-competing sectors of the economy, and over the possibility that low growth might turn into no growth. What had been a negative gap of nearly 4 percentage points between monetary growth and expenditure growth during the first half of 1984 became an equally large positive gap during the first half of this year, and short-term interest rates moved down to 7-year lows.

CHART 1. Real Net Exports of Goods & Services and Exchange Value of the Dollar

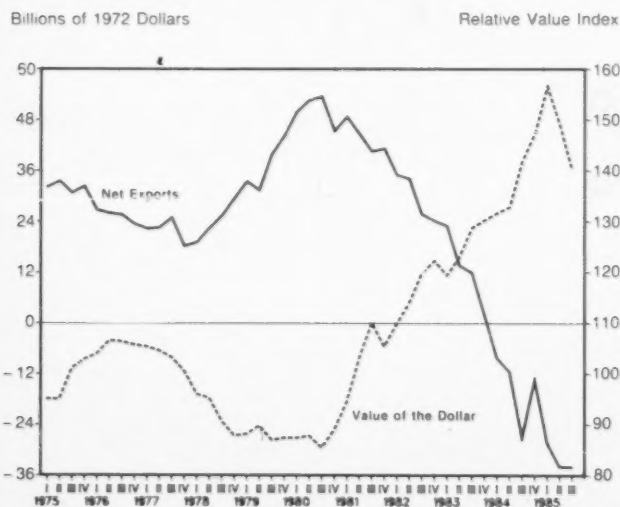


TABLE 4. Expenditure, Money, and Interest Rates, 1982:4-1985:3

Period	% Change at Annual Rate		3-Month Treasury Bill Rate (%) in Terminal Quarter
	Nominal GNP	Monetary Base	
1982:4-83:2	10.4	10.4	8.4
1983:2-83:4	10.3	7.6	8.8
1983:4-84:2	12.8	9.1	9.8
1984:2-84:4	6.4	5.5	8.8
1984:4-85:2	5.1	8.9	7.5
1985:2-85:3	6.7	9.8	7.1

The Fed has continued to support a revival of economic growth since the middle of this year. Indeed, the easing of Fed policy is exactly consistent with its apparent desire both to support the domestic economy directly and to keep downward pressure on the dollar through lower interest rates.

It is our perception that *the Federal Reserve Board will continue its active support policy* over the next several months while economic growth continues its slow recovery process. We have assumed that the discount rate—currently at 7.5 percent—will be dropped to 7 percent by the first of January, and that the monetary base will be allowed to grow at a 7 percent annual rate during the current quarter before it is brought down to a more sustainable rate of 5 percent in early '86. In the context of our Control Forecast this implies a rate of about 7 percent on 3-month T-bills throughout 1986 and a gradual drift up to 7.3 percent during 1987. The interest rate on Aaa bonds would, in these circumstances, decline from just under 11 percent currently to about 10.4 percent in early '87 and then remain at about that level for the balance of the year.

Since the beginning of this year, *Eurodollar interest rates* have not followed our rates down point-for-point, so that U.S. short-term rates have come down *relative* to an indicator of foreign rates even while both have been declining. We have assumed that this process will continue through the first quarter of 1986, by which time our 3-month treasury bill rate will have stabilized at about 7 percent. By then, U.S. short-term rates will have declined by 6 percent *relative* to European short-term rates over the period 1985:1 to 1986:1. Thereafter, we assume no further change in the relation between short-term rates in the U.S. and abroad. Since the dollar began to depreciate earlier this year, our major partners have lowered their export prices as denominated in their own domestic currencies to absorb some of the effect of the weakening dollar and keep their prices *to us* from rising sharply in dollar terms. We expect that this process will weaken in the months ahead and that the prices of our imports, *as denominated in foreign currencies*, will be rising at an annual rate of 1½ percent during the first half of 1986, and at a rate of 3 percent thereafter. Our assumptions about foreign prices and interest rates imply that *the U.S. dollar will continue to depreciate* over the next two years—by almost 13 percent from now until the end of next year, and by just under 6 percent from late '86 to late '87.

The rise of foreign prices and the depreciation of the dollar will combine to increase the effective price of our imports—by 15 percent between now and the end of next year, and by about 8.7 percent during the following year. This aside, however, we are expecting *no supply-side*

pressures which would lead to any substantial acceleration in the overall rate of inflation. We are assuming that:

- *Crude oil prices* will rise at 2-3 percent annual rates from 1985:2 through 1987:4
- *Natural gas prices* will rise at an annual rate of 3 percent over the forecast horizon.
- *Farm prices* will rise by about 2½ percent from 1985:4 to 1986:4, and by 3 percent during the following year.

Overview of the Control Forecast

The major features of our Control Forecast are summarized, on a calendar-year basis, in Chart 2. We are forecasting that this year's 2.4 percent rise in total national output—real GNP—will be followed by an increase of 2.9 percent for calendar 1986. Further, under the basically status-quo fiscal policy embodied in our Control Forecast, real GNP growth would accelerate to 3.6 percent for calendar 1987. Under this scenario, the civilian unemployment rate would average 7.3 percent next year and edge down to an average of just under 7.2 percent for 1987.

With no serious capacity pressures forecast to develop over the next two years, the overall rate of inflation is expected to remain moderate, although trending upward. As measured by the personal consumption deflator, consumer prices are forecast to be 3.9 percent higher in 1986 than in 1985, and another 4.6 percent higher in 1987. Much of the forecast acceleration of inflation over the next two years results from the path of import prices and represents the cost side of the declining value of the dollar. The growth of real disposable income—reflecting the upward tilt in the rate of inflation—is forecast to remain at about 2 percent annually in '86 and '87, while profits (including inventory valuation and capital consumption adjustments) are expected to hold fairly steady at about 8 percent of GNP.

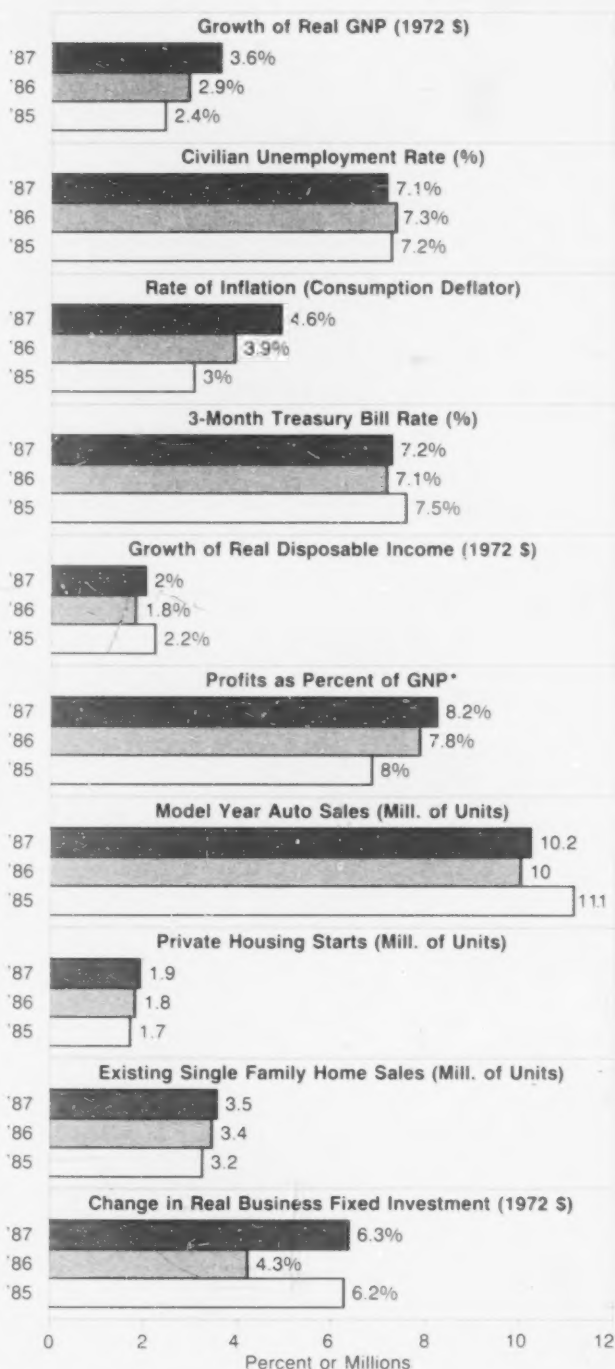
The auto market is forecast to display solid, but not record, strength over the next two years with sales of 10 million cars in the '86 model year and almost 10.2 million in the '87 model year. The combination of a fairly stable employment situation, output growth mostly in the range of 3-3½ percent, and favorable credit conditions, implies an active housing market with private housing starts—essentially flat at 1.74 million units this year—increasing to a total of 1.84 million units next year and about 1.95 million units in '87, while sales of existing single-family homes are forecast to increase from an estimated 3.2 million units this year to 3.4 million units in '86 and just over 3½ million units in '87.

Real business capital expenditure has slowed a bit during the past year and may even have dipped in the third quarter. The strengthening of domestic production in '86 and '87—along with favorable interest rates and growing profits—results in 4.3 and 6.3 percent increases in real business fixed investment for calendar years 1986 and '87, respectively.

The Dynamic Path in the Control Forecast

Some of the more important aspects of the dynamic path in the Control Forecast are shown in Charts 3-8. As shown in Chart 3, economic growth is forecast to be on a mildly accelerating track over the next year or so, with the rate of growth peaking at about 3.8 percent (annual rate) in early '87, and then backing off a bit for the balance of the year. The civilian unemployment rate (Chart 4) remains in the

CHART 2. Overview of RSQE Forecast for 1986-87



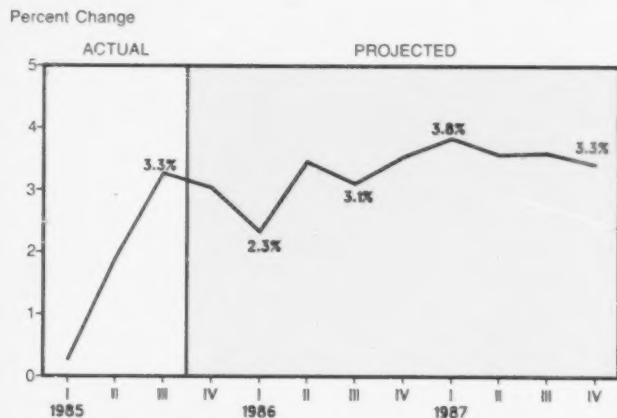
*Includes inventory valuation and capital consumption adjustments.

range of 7 to 7.3 percent over the next two years, with the low end of the range achieved in the second year of the forecast.

The favorable conditions regarding interest rates and inflation—already noted in earlier discussion—are shown in Chart 5, while Chart 6 graphs the path of relative price movements forecast for the next two years. It is clear that

industrial price pressures emanating from unit labor costs and crude material prices are expected to be quite moderate during 1986-87, while import price inflation appears at the opposite extreme as constituting the major anticipated inflationary factor of the next two years.

CHART 3. Annual Rate of Growth of Real GNP (1972 Dollars)



A critically important difference between recent and prospective economic behavior is shown in Chart 7, which juxtaposes the forecast depreciation of the U.S. dollar and the attendant improvement in our real net export position. We forecast that real net exports will be rising by the spring

CHART 4. Civilian Unemployment Rate

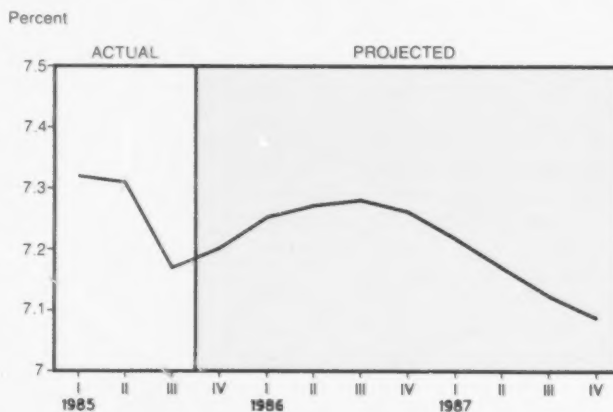


CHART 5. Inflation and Interest Rates

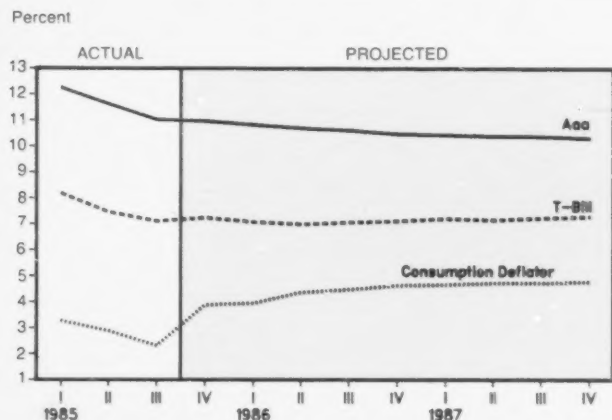


CHART 6. Relative Prices

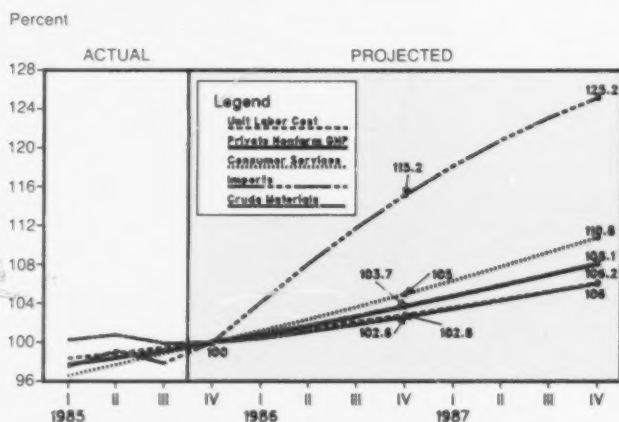


CHART 7. Real Net Exports of Goods & Services and Exchange Value of the Dollar

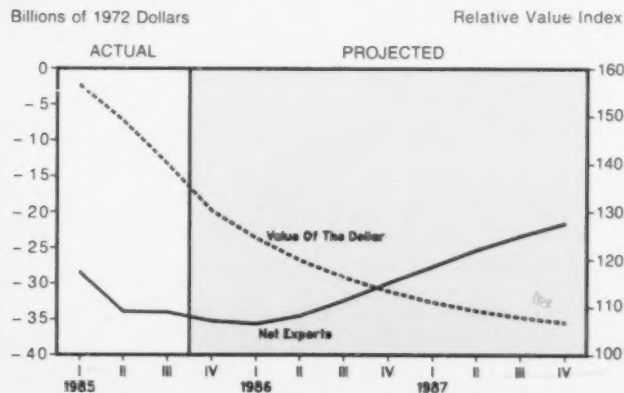
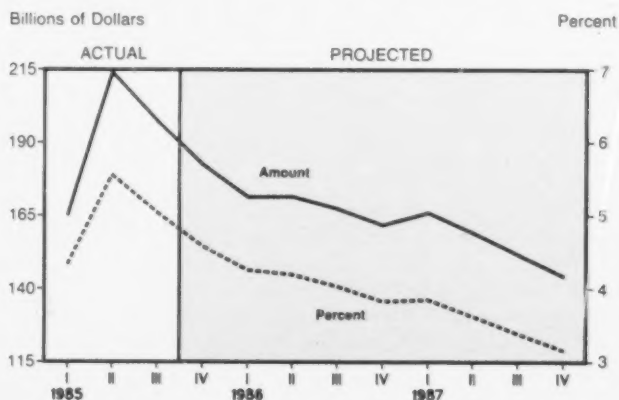


CHART 8. Federal Government Deficit (NIPA Basis): Amount and as a Percent of GNP



quarter of '86 and will post an average increase in excess of \$2 billion (1972 prices, seasonally adjusted annual rate) per quarter over the following year and a half. In current dollar terms, the trade balance is expected to continue to deteriorate until the spring of '87, when the trade deficit peaks at an annual rate of nearly \$150 billion. The turnaround in the nominal trade deficit lags that in the real trade deficit by at least a year.

Finally, Chart 8 shows that the federal budget deficit, both in dollars at annual rate and as a percent of GNP, is on a declining path in our Control Forecast. Between the closing quarters of fiscal '85 and fiscal '87, we show the federal deficit declining from nearly \$200 billion at annual rate to just over \$150 billion, and from 5 to 3.4 percent of the GNP. The privately held government debt, however, currently amounts to about 34 percent of GNP—up from 25 percent as little as 3 years ago—and merely holding it there would require a deficit-to-GNP ratio of no more than 2½ percent at current GNP growth rates. Thus, we are in for continued increases in the debt-to-GNP ratio for at least the next several years, which implies increasing difficulty in trying to keep the deficit-to-GNP ratio coming down. It is this vicious cycle which is generating the increasing concern evidenced by the belt-tightening in the fiscal '86 budget compromise, and the recent Congressional attempts to put a required path of deficit reduction into the law.

Budget Alternatives and Their Implications

Because the federal budget scenario in our Control Forecast fails to meet the fiscal '87 deficit reduction contained in the Congressional discussion surrounding the Gramm-Rudman amendment and various altered states thereof, we thought it important to present at least one forecast alternative which does incorporate such a required major reduction in the fiscal '87 deficit. In addition, we present a less extreme alternative based on the implementation of several changes to currently existing indexation provisions in the federal budget.

In our Control Forecast the fiscal '87 federal budget deficit declines by \$13½ billion—a shortfall of \$23½ billion compared to the \$36 billion that would have been targeted under Gramm-Rudman. Our first budget alternative involves cutting federal expenditures by enough to make up for the \$23½ billion shortfall in the deficit reduction. This turned out to require an expenditure reduction of \$38 billion to compensate for the induced revenue losses and expenditure increases which result automatically from the income and employment losses generated by a cut in government spending. We allocated the necessary expenditure reduction by following the rules contained in the Gramm-Rudman amendment to the Debt Limit bill, H.J.RES.372. After exempting debt interest, Social Security, and the estimated proportions of other major spending categories which are subject to long-term contracts, we removed all remaining cost-of-living adjustments (COLA) from the fiscal '87 budget. We were then left with the requirement of cutting \$38 billion of expenditures out of a target subtotal of federal spending amounting to \$387 billion. In other words, removal of exempt categories and long-term contracts left only about 38 percent of the total expenditure budget available for across-the-board budget cuts of about 10 percent. The major expenditure cuts and their relationships to the total budget in that category are as follows:

	Budget Cuts (billions of dollars)	Percent of Total Category as Shown in Table 3
Defense Purchases	\$22.5	8.3
Nondefense Purchases	8.3	9.9
Grants-in-Aid	5.6	6.2
Other	1.6	—
TOTAL	\$38.0	3.8

We implemented the required expenditure reductions in 1986:4, the first quarter of FY '87. Further, since we were cutting grants-in-aid to state and local governments by \$5.6 billion, we assumed that these units of government would protect their own budgets through a 50/50 combination of higher personal taxes and reduced purchases of goods.

Our second budget alternative is much less extreme. In this case we have implemented two commonly-discussed revisions to the indexation procedures in the federal budget. One was to limit the indexation of the personal income tax structure to the excess of inflation over 2 percent; the other was to limit the COLA in Social Security retirement benefits in exactly the same way, to the excess of inflation over 2 percent. These changes were made effective on January 1, 1987 and have a combined impact of about \$6½ billion on the FY '87 deficit. What makes these potentially attractive policy changes is that their impacts cumulate over time if the partial-indexation policy remains permanent.

Charts 9-12 compare the implications of these alternative budget paths with the Control Forecast. As shown in Charts 9 and 10, the Gramm-Rudman alternative has major macro-economic impacts. The sharp expenditure cut implemented in 1986:4 nearly produces a dead stop in the economy—real GNP growth in 1986:4 is reduced from 3½ percent in the Control run to barely 9/10 of one percent under Gramm-Rudman. The growth rate in the alternative recovers thereafter, but remains behind that in the Control run throughout 1987. By 1987:4, real GNP is more than \$23 billion (annual rate)—or 1.3 percent—below its level in the Control Forecast, with the result that the unemployment rate has risen by about half a percentage point to nearly 7.6 percent compared with 7.1 percent in the Control run. The partial-indexation alternative has much less impact and raises the unemployment rate by under one-tenth of a percentage point.

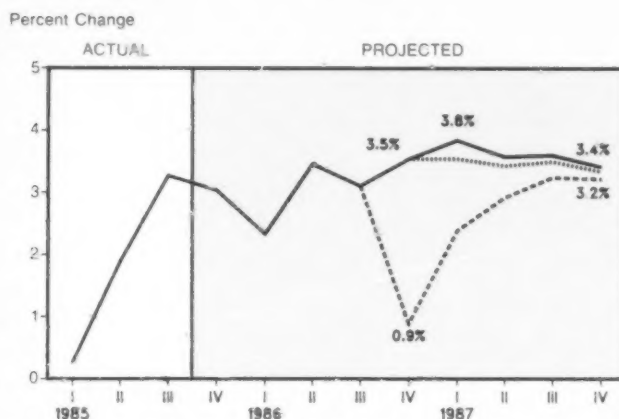
Automobile sales are heavily impacted by the Gramm-Rudman type policy, as shown in Chart 11, with model-year '87 sales reduced by more than 400 thousand units.

The deficit path is, of course, markedly lowered in the Gramm-Rudman experiment. By the 4th quarter of 1987, the deficit has been reduced by \$25 billion at annual rate relative to that in the Control Forecast and dips below \$120 billion (Chart 12). The partial-indexation alternative has a far smaller effect on the deficit, with an impact of about \$8 billion at annual rate in late '87.

Conclusions

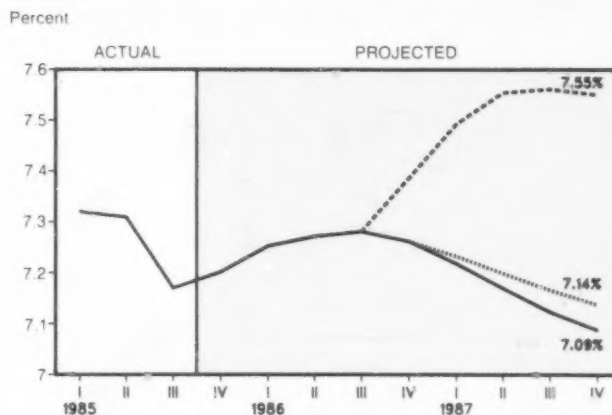
We conclude this report with some brief thoughts about the proper course of stabilization policies for the near term. An anti-deficit policy of the kind and magnitude typified by Gramm-Rudman is extreme both in pure economic terms

CHART 9. Real GNP Growth



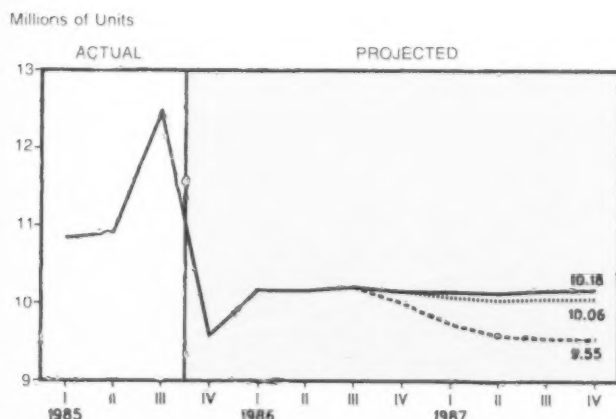
Note: Solid line indicates Control Forecast; dashed line indicates Gramm-Rudman proposal; dotted line indicates partial indexation option.

CHART 10. Civilian Unemployment Rate



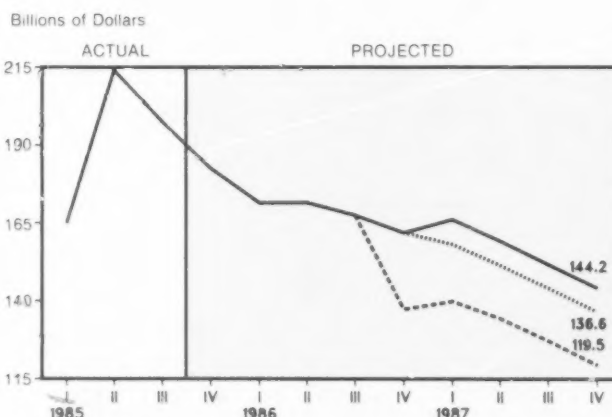
Note: Solid line indicates Control Forecast; dashed line indicates Gramm-Rudman proposal; dotted line indicates partial indexation option.

CHART 11. Automobile Sales



Note: Solid line indicates Control Forecast; dashed line indicates Gramm-Rudman proposal; dotted line indicates partial indexation option.

CHART 12. Federal Budget Deficit



Note: Solid line indicates Control Forecast; dashed line indicates Gramm-Rudman proposal; dotted line indicates partial indexation option.

and in political-economic terms. The experiment with Gramm-Rudman that we have just discussed was, of course, loaded to be super-extreme. One would assume that were so sharp a fiscal contraction required by law, its effects would in all likelihood be mitigated by a concurrent swing toward an easier monetary policy. Indeed that would provide the *ideal* circumstance for the Fed to move strongly to support permanently lower interest rates. The short-term impact would undoubtedly still be contractionary, but the Fed could soften the landing, and it would have every reason to do so under economic circumstances of the kind contained in our forecast.

The biggest difficulty with a legislated, formula-type solution to the deficit problem is the rigidity thereby imposed on fiscal policy and the overwhelming burden that it could place on monetary policy if the underlying economic

conditions—especially if not accurately anticipated—made a sharp fiscal contraction seriously inappropriate.

The political-economy problems associated with allocating the responsibility for impoundment of funds, absorbing the heat of those constituencies which would be most adversely affected by funding cuts, the inefficiencies of on-again/off-again programming, and so on, are all too obvious. It is even possible—as has been suggested by many Washington-watchers—that this is precisely the reason for such legislation. One really unpleasant experience with its requirements may be the only way to raise an overwhelming public sentiment for phasing in a series of tax increases which will do the trick gradually, and yet be naturally responsive to the state of the economy. It would be sad to have to run so dangerous an experiment when the appropriate solution is no real mystery at all.

Gramm-Rudmanizing the Economy

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Introduction

The economic policy legislation recently passed by the Congress and signed by the president, known as Gramm-Rudman-Hollings or more popularly Gramm-Rudman, is in principle one of the most far-reaching pieces of economic policy legislation ever enacted. It is also one of the most controversial, and has been roundly condemned by most economic policy-makers with academic credentials. It also appears to be widely regarded as bad legislation even by many of those who voted for it, who are essentially saying that while it is a bad piece of legislation it's better than the alternatives.

How Does Gramm-Rudman Work?

To understand the objections of many policy-makers to a piece of legislation like Gramm-Rudman, all one has to do is look at the process that the legislation calls for, and at the possible outcomes. Basically, the act says that federal government deficits must be reduced from their present level (estimated as roughly \$190-\$200 billion when the legislation was enacted) to zero over a five-year period. Thus deficits must be reduced by \$36 billion annually over the next five years, going from \$180 this fiscal year to \$144 to \$108 (During the first year to which Gramm-Rudman applies, FY 86, there is some slippage in that numerical calculation, but the general principle is as stated).

How is this to be accomplished? The first step, covering only part of the current fiscal year, has just been announced and involves cutting some \$11.7 billion. It is being widely reported in the press as involving little hardship—just a few inconveniences here and there. But next year's problem will be different—and predictably much larger.

For future years, the president as usual will propose a budget to the Congress in late winter. The Congressional budget committees will then undertake the usual assessment of the president's budget proposal, modifying it to suit the preferences of the House and the Senate. At some point a conference committee will emerge with a budget that is agreeable to both House and Senate, and the president can either sign that budget or not. If the president signs a Congressionally-agreed budget, that document goes to the implementors of Gramm-Rudman to insure that it meets the law's requirements. If the deficit contained in the agreed budget does so, in the judgment of the implementors—the administration's Office of Management and Budget (OMB) and the Congress's Congressional Budget Office (CBO), as overseen by the General Accounting Office (GAO)—then it is enacted into law.

But if the deficit, as estimated by the tripartite Board of Overseers, is too large for Gramm-Rudman's requirements, then there is a complicated set of rules for deciding which expenditures are to be cut, and by how much. The rules exclude significant elements of the budget from being cut by way of Gramm-Rudman—Social Security, many other en-

titlement programs, some military programs—but everything else is more or less fair game. What the Board of Overseers does is simply to calculate how much must be cut to meet the Gramm-Rudman requirements, exclude the parts of the budget that are safeguarded from cutting, and then proceed to administer a "sequester" rule—if \$15 billion must be cut and the eligible budget items total \$450 billion, 3 percent must be cut from each of several thousand account numbers that govern federal government expenditures.

What happens if the president and the Congress cannot agree on a budget—that is, if either the two houses of Congress cannot agree on a conference committee budget that both houses will pass, or if the president will not sign a conference committee budget and the House and the Senate cannot override the president's veto? In that case the House and the Senate will presumably pass some kind of continuing resolution, which will authorize expenditures at their current levels or with some adjustment to current levels. That budget will then be Gramm-Rudmanized—the tripartite commission of OMB, CBO, and GAO will assess the deficit that is implied by the continuing resolution, exclude the parts of the budget that cannot be Gramm-Rudmanized, and do their thing on the parts that can.

How does the tripartite Board of Overseers work? The OMB obviously represents the president and the administration's position, the CBO represents the Congress's position, and the GAO is the referee. OMB and CBO each have to produce an estimate of what the deficit will be, given a set of laws that govern expenditures (either entitlements that can be drawn on by the entitlees, or discretionary outlays that are included in the current law), plus an estimate of tax revenue based on some set of assumptions about how the economy will perform during the next fiscal year. Estimates of both expenditures and revenue are to some extent judgments rather than facts—some people who are entitled to program support don't claim it, and tax revenues are clearly a function of a variety of economic activity variables. Thus the CBO and OMB estimates of the budget might well disagree. In that event, it is up to GAO to decide what shall be the operational deficit number before expenditures get Gramm-Rudmanized. The presumption is that GAO will split the difference between OMB and CBO estimates, although they don't have to.

What happens if the assumptions underlying either expenditure or revenue estimates are not realized during the fiscal year, as is almost bound to be true generally and looks to be likely during the current fiscal year? In that case, any shortfall in the Gramm-Rudman targets that occurs because expenditures or revenues or both are different from the GAO estimate will simply be added to (or subtracted from) the next year's target. That is, if expenditures are \$10 billion more than expected and revenues are \$10 billion less than expected, and thus the deficit is \$20 billion higher than permitted by Gramm-Rudman, the next year's deficit reduction target will have to be \$56 billion rather than \$36 billion. And vice versa if the expenditure and revenue numbers are

reversed—it will only have to be \$16 billion lower. In the current situation, the estimated FY 86 deficit numbers have been growing steadily, and the \$11.7 billion in cuts just announced will almost certainly not reach the Gramm-Rudman targets at the end of this fiscal year. Hence, next year's decline in deficit will have to be larger than \$36 billion—possibly quite a lot larger.

Are there any safety valves in Gramm-Rudman? Yes there are—two. If the economy is determined to be in recession during the prospective fiscal year (or is forecasted to be in recession), then Gramm-Rudman is off. Of course, the \$36 billion of deficit reduction that was forestalled because the economy was, or was forecast to be, in recession will have to be added to the following year's Gramm-Rudman target, which will then become a \$72 billion reduction in deficit. Second, Gramm-Rudman is off if there is a war. As one senator is reported to have remarked in committee, "Is it OK if we declare war generally, or do we have to declare war on somebody?" It is unclear whether the spirit of Gramm-Rudman would be violated if the U.S. and, say, Iceland produced a mutual assistance pact which enabled either to declare war on the other without prior notice and without malice!

Does Gramm-Rudman put political pressure on either the president or the Congress to compromise their budget differences, or to dig in their heels? It's hard to tell. The president, who favors growth in military outlays and is adamantly opposed to a tax increase, may either have to acquiesce in a tax increase or face the likelihood that his defense budget will be Gramm-Rudmanized. The Congress, who would prefer to maintain social programs and other discretionary outlays at what they see as tolerable levels and are obviously reluctant to take the lead in suggesting a tax increase, may have to either face up to a tax increase or see the possibility that many of the social programs deemed most important will be Gramm-Rudmanized. Thus the president and the Congress have some incentive to agree on mutually acceptable levels of defense and non-defense outlays, since otherwise both get Gramm-Rudmanized and in roughly equal proportions. But, of course, if they could agree on some mutually acceptable compromise, there wouldn't have been any Gramm-Rudman bill in the first place. Or if they could agree that tax increases had to be part of any deficit reduction package, there also wouldn't have been any need for Gramm-Rudman.

Can Gramm-Rudman produce a recession all by itself? Technically, the answer is no. What happens is that OMB and CBO produce a deficit forecast based on the assumption that either expenditures or taxes or both will be adjusted to fit the stipulations of Gramm-Rudman. Hence if the economy were relatively weak before the application of Gramm-Rudman, reducing fiscal stimulus either by cutting expenditures or raising taxes or both might well produce a forecast of recession. But that forecast, if it was agreed to by the GAO arbiter, would eliminate the requirement for Gramm-Rudman in that particular year.

But that relatively benign scenario may not be a good description of what actually happens. Suppose GAO assesses the growth rate of the economy as 2.0 percent, given the cuts stipulated by Gramm-Rudman, and the cuts are made. The first quarter data come in and the growth rate is -0.2 percent. That's not a recession, although it's not very good. The next quarter comes in and the growth rate is -1.2 percent—but the previous quarter is revised from -0.2 percent to +0.1 percent. Is that a recession? Not by

the "two consecutive quarters of negative growth" rule. The third quarter arrives at -2.0 percent. We are now clearly in recession, unemployment would have been rising for the past 5 or 6 months, and the year is three-fourths complete. The Gramm-Rudman cuts can be stopped, but the damage has long since been done and will predictably continue for awhile.

Forecasts that are contingent on specified cuts in spending or increases in taxes or both depend on how one assesses the combined effect of reduced fiscal stimulus and the presumably easier monetary policy that would accompany it. After all, lower deficits have some automatic offset, given the same monetary policy stance, in the form of less borrowing and therefore lower interest rates. And of course a smaller deficit is likely to have some impact on the trade balance, the value of the dollar, etc., leading to further complications in producing a reliable Gramm-Rudman forecast. But forecasts are always uncertain, and it is important to keep in mind that any forestalling of Gramm-Rudman in 198x just makes the problem twice as large in 198x + 1!

The Impact of Gramm-Rudman

What's basically wrong with Gramm-Rudman? The difficulty is that it signals a breakdown of the economic policy formulation process, transfers important decisions about national priorities to a computer (represented by the GAO's determination of the percentage cutback to be applied to each of the eligible expenditure categories), creates adverse incentives for the managers of public programs, and effectively assumes that there is no important impact of fiscal policy on macroeconomic activity.

Breakdown of the Policy Process. Budget decisions in any democratic society are political decisions, and are reflective of national priorities. Prior to Gramm-Rudman, the administration and the Congress had to find a way to reconcile their different perceptions of priorities, or to live with the political consequences if they could not come to agreement. Under Gramm-Rudman, political posturing is rewarded and responsible compromise is (probably) penalized.

Decision Making by Computer. Under normal circumstances, there is a slow but perceptible response of policy-makers to changing circumstances that dictate changes in emphasis of different types of public programs—defense vs. social programs, research and development vs. current services, health vs. education and training, jails vs. highways, etc. If the differences in priorities that have plagued the past several years of budget discussions cannot be reconciled, everything gets cut proportionately by way of the sequesters applied to eligible programs—fat along with muscle, wasteful programs along with efficient programs, etc. This process is not a tribute to rational decision-making.

Management Incentives. Under normal circumstances, public as well as private managers provide policy-makers with assessments of what can be accomplished with various levels of budgetary support. It is predictable that managers who can accomplish more with the same resources than those who are less effective will be greeted with enthusiasm by agency heads for their efforts at achieving economies—but such managers will then find their programs Gramm-Rudmanized to exactly the same degree as the inefficient. Once that happens, everybody has incentives to pad their budget requests and to exaggerate the dire consequences of not meeting their requests.

Fiscal Policy Impact. Gramm-Rudman effectively specifies that the fiscal tightening implied by gradual reduction in the size of the deficit is entirely independent of the level of aggregate economic activity, excepting the loophole provision that Gramm-Rudman is inoperative when a recession is in process or is forecast. Thus it calls for the same reduction in fiscal stimulus whether the economy is in a growth recession, with real growth rates in the 2 percent zone, or whether the economy is booming, with real growth rates in the 5 percent zone. Of course the aggregate economic impact of the Gramm-Rudman cuts can be offset, at least in principle, by other macro-economic policies: hence it is hard to forecast exactly how much impact on real growth rate would actually be felt by comparing the Gramm-Rudman budget process with the results of some other budget process.

An Overall Assessment

Given that there is so little genuine enthusiasm for Gramm-Rudman, certainly among academic economists and even among many of its supporters, how did it become current policy? The answer seems clear enough: Gramm-Rudman has been agreed to by a majority of the Congress and approved by the administration because, unappetizing as it may be, it is judged better than the budget process that it replaces or supplements.

Why did the budget process break down? Political partisans would provide different responses. The Democrats would presumably say that Gramm-Rudman is the simple consequence of an ideologically rigid president refusing to recognize that the original vision of supply-side economics is a demonstrable failure. After all, they would say, the president promised that he could rebuild defense, maintain Social Security, cut taxes, and balance the budget. His critics pointed out (including the current vice-president, who coined the term "Voodoo Economics") that it couldn't be done except with mirrors. On the evidence, the critics were right.

On the other side, administration partisans would argue that the real problem is that Congressional Democrats refuse to recognize that non-defense programs are not worth what they cost in terms of social gain versus social cost, that there is enough waste and profligacy in these areas to balance the budget if only the Democrats would cooperate, and that the deficit problem facing the society results from a stubborn Congressional refusal to go along with the president's program.

Be that as it may, there seems to be overwhelming consensus that whatever the causes of the present roughly \$200-billion-per-year deficit, they are having consequences for the future of the American economy and society that simply cannot be tolerated, and some way must be found to get the deficit under control. Since the normal process of political bargaining isn't working, some other process must be put in place that forces the outcome, even if it involves significant costs in terms of adverse side effects.

So far as this writer is concerned, the real culprit which has undermined the normal budgetary process, and which is therefore responsible for Gramm-Rudman, is the ideological position taken by the administration on taxes.

Given the arithmetic of the total budget, there is simply no way that the deficit can be eliminated without a tax increase of significant proportions, or what is the equivalent, closing a significant number of tax loopholes.

A few relevant facts about federal government expenditures and receipts shows why virtually all serious budget analysts, of whatever political persuasion, have concluded that the deficit problem cannot be solved without a tax increase of some kind. Over the last three years, since mid-1982:

- Federal Government expenditures have grown by \$238 billion, receipts by roughly \$150 billion, and the deficit by about \$88 billion—to its present level of \$201 billion.
- Almost 80 percent of the spending increase—over \$180 billion of the \$238 billion—has come from three categories that the administration has declared off limits to budget cuts—roughly \$80 billion in defense, \$60 billion in Social Security, and almost \$45 billion in interest on the (rapidly growing) national debt.
- All other expenditures of the federal government, leaving out defense, Social Security, and interest on the debt, come to \$338 billion at present, have been roughly constant in real terms since mid-1982, and are mainly transfer payments to states and local governments and reimbursements under medicare and medicaid—items that have been strongly defended against further cuts by the Democratic House.
- The major discretionary item in the federal budget that has not either been declared off-limits by the administration or is not an entitlement program is nondefense purchases of goods and services—expenditures for items like highways, the criminal justice system, farm price supports, research and development, student loans, housing programs, airports and air traffic control systems, the Congress, the White House, etc.—and amounts to a little over \$80 billion in total at present.

The numbers thus say that *either* we cut one of the off-limits programs, cut sharply into entitlements like medicare and medicaid, or face the simple fact that \$200 billion in budget cuts cannot be obtained from \$80 billion of discretionary outlays.

And finally, there is simply no credible evidence that we can "grow ourselves out of the deficit," as the supply-siders originally argued and as some continue to believe. Supply-side tax cuts did not increase tax revenues—they reduced them, and substantially.

If all that's true, tax increases must be brought into the picture, or else some other current untouchable—defense, Social Security, poverty entitlements—has to be reconsidered. But the politics of the 1984 election make tax increases an unpalatable budget choice, both for the president and the Congress. The president has made taxes his "make my day" issue—while the Congressional Democrats are not going to be found out in front on a tax increase given the political pummeling they received on that issue in the 1984 election. Perhaps Gramm-Rudman will force the tax issue, since it is likely to be a socially less damaging alternative than many of the others that will have to be faced by the budget protagonists this year and next.

January 1986

1986 Prospects for Consumer Demand: Diminished But Still Favorable

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The most recent Survey of Consumers indicates a declining overall trend in consumer sentiment. The Index of Consumer Sentiment was 92.8 in the third quarter 1985 survey, down from 98.9 one year earlier (see the chart below).^{*} Nonetheless, this was the tenth consecutive quarter with an Index figure in the 90s, the longest and highest sustained period of consumer optimism recorded since the 1960s.

The small overall decline recorded during the past year was widespread among all major population groups, defined by age, income, and region. The decline was not, however, shared equally by the several measures of attitudes and expectations. Consumers' views of their current financial situation and buying conditions remained at very favorable levels, while their evaluations of prospects for the domestic economy during the year ahead have declined to a significant extent.

Slower Economic Growth Limits Job Prospects

During the past two years there has been a sharp decline in the proportion of consumers that expected continued improvement in the national economy. In the third quarter 1985 survey, 25 percent of all families expected the economy to improve, down from 33 percent one year earlier, and the all-time peak of 52 percent in the second quarter of 1983. This sharp fall in favorable expectations, however, was not mirrored by a comparably sharp rise in unfavorable expectations. A worsening economy was expected by only 15 percent of all families in the third quarter 1985 survey. Most

of the shift in opinion during the past two years has been towards the expectation that the performance of the national economy would remain unchanged during the year ahead, rising to 57 percent in the third quarter of 1985, from 39 percent two years earlier.

Because slower growth but no recession is expected, consumers view the economic outlook in somewhat dulled but nonetheless favorable terms. Among all families in the third quarter survey, 55 percent expected good times financially in the economy as a whole during the year ahead, not far below the 63 percent recorded one year earlier. Although the third quarter 1985 reading is the lowest level recorded during the past two years, it remains as favorable as the late 1970s peak. Overall, consumers' views suggest that economic conditions will be somewhat worse next year, but that they will still be good, on balance.

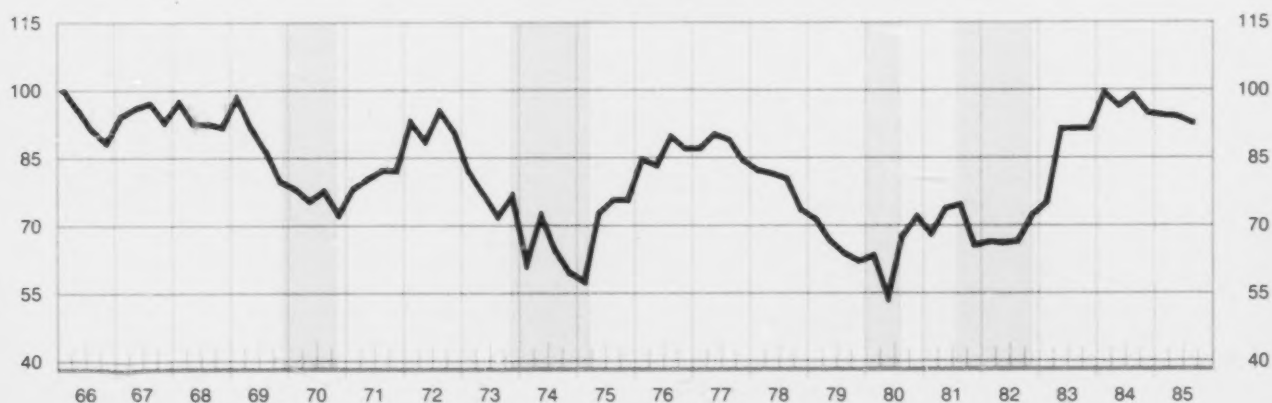
The major factor underlying the maintenance of favorable assessments of the economy has been the sustained declines in inflation. In the third quarter 1985 survey, consumers expected the annual rate of inflation to average 4.2% during the year ahead, the lowest level to be recorded in more than a decade. At their third quarter level, inflation expectations are approximately one-third of their 1980 peak.

The primary concern expressed by consumers about the outlook for continued slow economic growth involves limited job prospects. The proportion of families that expected the national unemployment rate to decline during the year ahead fell to just 15 percent in the third quarter 1985 survey, half the proportion that expected increases. That only small changes in the unemployment rate were foreseen is supported by the majority expectation (54 percent) that the unemployment rate would remain largely unchanged at its current level during the year ahead.

^{*}The Index declined further, to 91.1, in the fourth quarter 1985 survey, which the author will discuss in the next issue.

INDEX OF CONSUMER SENTIMENT

February 1966 = 100



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

Confidence in government economic policies to control inflation and unemployment remained near record high levels in the recent survey. Apparently, the sustained declines in inflation have thus far offset the rising concern with unemployment in terms of policy evaluations. Nonetheless, consumers continue to view unemployment, rather than inflation, as the more serious problem facing the nation.

Interest rate expectations have remained unchanged since the start of 1985, at improved levels compared with mid-1984. Interest rate increases during the year ahead were expected by 40 percent of all families in the third quarter of 1985, down from 55 percent one year earlier. The majority (58 percent) now expect interest rates to remain at their current level or to decline during the year ahead.

Personal Finances Remain Favorable Despite Slower Income Growth

The financial situation of American families has remained favorable in the most recent survey, although the pace of financial improvement has slowed since the start of 1985. An improved financial situation was reported by 42 percent of all families in the third quarter 1985 survey, just below the cyclical peak of 45 percent recorded one year earlier. Even after this small decline, evaluations of personal financial progress have remained more favorable during the past two years than at any other time during the prior 10 years.

The major factor behind the substantial improvement recorded during the past few years has been sustained declines in inflation. When asked to explain how their financial situation had improved or worsened, just 14 percent of all families in the third quarter 1985 survey mentioned that rising prices had eroded living standards, less than one-third of the peak level recorded five years earlier. Twice as many families reported income increases as reported declines in the third quarter 1985 survey (32 versus 15 percent), a somewhat smaller margin than recorded a year ago (36 versus 13 percent). It was this moderation in the growth of income that was responsible for the small decline in overall evaluations.

When asked about prospects for their financial situation during the year ahead, consumers continued to hold a positive outlook in the most recent survey. In the third quarter of 1985, 35 percent of all families expected their financial situation to improve, not far below the cyclical peak of 41 percent recorded at the start of 1984. The small decline in financial prospects can be traced to less favorable income expectations. Among all families in the third quarter 1985 survey, 56 percent expected income increases, down from 64 percent one year earlier. Because inflation expectations have declined to a greater extent than income expectations, real income expectations have risen and have maintained favorable financial expectations. That consumers expect slow real income growth rather than declines during the year ahead is indicated by the few families that expected overall reversals in their financial situation. Just 12 percent of all families in the third quarter 1985 survey expected their financial situation to worsen during the year ahead.

Consumers Remain Willing to Use Credit Amid Rising Indebtedness

The continuation of favorable personal financial prospects, coupled with declines in interest rates, has maintained consumers' willingness to use accumulated savings and to

incur new debt in order to make major purchases. Among all families in the third quarter survey, 36 percent reported their willingness to use savings, just below the 40 percent cyclical peak recorded one year earlier. Willingness to incur new debt was reported by 29 percent of all families in the third quarter 1985 survey, the highest level during the past five years.

Consumers incurred debt at a much faster pace during the past year, but the overall level of debt incurrence has thus far remained below the levels recorded in the late 1970s. The ratio of net increases in mortgage debt to personal disposable income was 5.2% in 1984, well below the 1978 peak of 7.5%. In contrast, the net increase in installment and other consumer credit as a proportion of disposable income was 3.7% in 1984, above the 1978 peak of 3.3%. In the first half of 1985, net increases in consumer credit continued to rise, reaching 4.5% of income in the second quarter. Given the high level of vehicle sales in the third quarter, the primary component of installment debt, this ratio can be expected to establish a new record level for the year 1985 as a whole.

Do these elevated levels of debt imply that consumers are overextended? The total outstanding amount of home mortgage, installment, and other consumer debts was 1.9 trillion dollars at year-end 1984. The household sector held \$1.31 in savings deposits for each dollar in mortgage and consumer debt at year-end 1984, substantially above the low of \$1.18 recorded in 1979. When all deposits, bonds, and equities are summed, representing a less liquid pool of financial assets, they amounted to \$2.54 for each dollar of mortgage and consumer debt. When all financial assets are compared with all financial liabilities, households held \$3.04 in assets for each dollar in debt. Although these ratios had only fallen slightly by year-end 1984, based on the first half of 1985, the estimated ratio of savings deposits to mortgage and consumer debt fell to \$1.24, at annual rates, a level comparable to the late 1970s.

Given the lower growth rates expected in both wages and prices, consumers can no longer look toward inflationary increases in incomes to ease the burden of high repayment amounts. Rather than reacting by lowering the amount borrowed, consumers have focused more attention on lengthening the repayment period, so as to accommodate the higher amounts borrowed within their budgets.

The average transaction price for a new car, as well as the amount financed, has approximately tripled from 1972 to 1984. During this time period median household income did not rise as much. As a consequence, the ratio of transaction prices to income rose from 35% to 43%, and the ratio of amount financed to income rose from 28% to 36%. But because the average maturity of vehicle loans has also increased, the payment amount as a proportion of income has not shown any significant increase. From 1972 to 1984, the repayment ratio has remained between 11% and 12%, with only small variations.

Buying Attitudes Reach New Peaks as Discounts Become The Norm

Favorable attitudes toward buying conditions reached new all-time record levels during 1985 for each of the major types of discretionary purchases studied: purchases of homes, vehicles, and large household durables. It was in the spring of 1983 that buying attitudes first reached record favorable levels. Following small declines in the balance of 1983, at-

titudes toward buying conditions rebounded to peak levels by the spring of 1984. Small declines were again recorded in the second half of 1984, only to once more rebound to peak levels in 1985. The major reason for this pattern of surges followed by declines has been changes in the availability of discounted prices and reduced interest rates.

These trends indicate important shifts in how consumers evaluate market conditions. The cyclical peaks recorded in the 1970s were driven by an inflationary psychology, which created incentives to purchase in advance of the then escalating inflation rates. At the present time, very few consumers cite the advantage of buying in advance of rising prices. In contrast, the current recovery has been built on the widespread appeal of price discounts. It is now the positive appeal of discounted prices, not the negative pressures to act before further increases, that determines consumer reactions to prices. Rather than inflation, higher and more variable interest rates now represent the primary source of uncertainty about future buying conditions. Consumers have thus come to view interest rate trends as the most important factor in the timing of their purchases.

As a result of these changes in consumer attitudes, the availability of price and interest rate discounts has become the expected norm. And the presence or absence of these incentives will shape future trends in buying attitudes.

Household Durables. In the third quarter 1985 survey, 72 percent of all families held favorable attitudes toward buying conditions for large household durables. This is just below the all-time peak of 74 percent recorded in each of the two previous quarters. The maintenance of buying attitudes at these very favorable levels has been due to favorable perceptions of current prices for durables. Among all families in the third quarter 1985 survey, 38 percent mentioned the availability of price discounts on household durables, just below the all-time record of 41 percent recorded at the start of 1985. Just 12 percent of all families complained about high prices in the third quarter 1985 survey. On balance, these trends represent the most favorable perceptions of market prices for large household durables since the 1960s.

Homes. In the third quarter 1985 survey, the proportion of families that held favorable attitudes toward buying conditions for homes set a new all-time record, rising to 71 percent, reversing the small decline recorded in the second half of 1984, as shown in the chart on p. 93.

The reasons underlying these very favorable home-buying attitudes are quite different from those of the past. Whereas in the late 1970s consumers evaluated buying conditions in terms of expected future prices, consumers now hold favorable perceptions of home prices. At the 1977 peak, 46 percent supported their favorable views by referring to the advantages of buying in advance of rising home prices. In the most recent survey, just 6 percent gave buy-in-advance price rationales. At the 1977 peak, four times as many families complained about high home prices as mentioned the availability of reduced home prices (22 versus 4 percent). At the 1985 peak, in contrast, twice as many families mentioned the availability of reduced home prices as complained that prices were too high and cause for postponement (24 versus 12 percent). Throughout the past two years, favorable references to current home prices have outnumbered unfavorable references, a trend not seen since the 1960s.

In addition to shifting price perceptions, the current recovery in attitudes is distinctive in its reliance on interest

rate trends. In the third quarter 1985 survey, 57 percent of all families cited trends in mortgage interest rates in support of their favorable assessments. At the 1977 peak, in comparison, just 12 percent of all families favorably mentioned interest rates when asked to explain their views. During the past year, the reasons underlying these favorable references to mortgage interest rates have shifted from the appeal of borrowing in advance of expected increases to the current availability of lower rates. In the third quarter 1985 survey, 52 percent of all families mentioned the current availability of reduced mortgage interest rates, up from 22 percent one year earlier. References to the advantages of borrowing in advance of future increases in mortgage rates fell to 5 percent in the third quarter of 1985 from a peak of 20 percent one year earlier.

Vehicles. In the third quarter 1985 survey, favorable attitudes toward buying conditions for cars were unchanged at the all-time record level first established in the second quarter (see the chart on p. 93). Among all families, 67 percent held favorable vehicle-buying attitudes in the third quarter of 1985, which completely offset the small decline recorded in late 1984. The recent improvement was due to the increased availability of reduced interest rates on vehicle loans, mentioned by 38 percent in the third quarter of 1985, three times its year-earlier level.

Summary Outlook

How to summarize these various findings? Recent trends in consumer attitudes and expectations have exhibited many of the characteristics of the later stages of expansion. The overall level of consumer confidence remains high, with partially offsetting changes limiting the amount of the overall decline. Lower interest rates and favorable perceptions of market prices have maintained buying attitudes at record favorable levels. Although consumers expect slow economic growth during the year ahead, they expect it to be accompanied by low rates of inflation and lead to only small increases in the unemployment rate. This outlook for slow but sustained growth, given the economic turbulence of past years, has supported the view among consumers that good times financially will continue in the country as a whole.

Since the upward momentum in consumer sentiment has now been exhausted, these results point toward diminished but still favorable prospects for consumer demand in 1986. The strongest aspects of consumer sentiment—personal finances and buying attitudes—have resulted from low inflation and widespread discounting. The weakest aspects involve lowered prospects for income and employment. The pace of real income growth during the year ahead will thus play a pivotal role. Increases in consumer spending are not likely to outpace growth in incomes, indicating a rising saving rate. But the decline in sales rates, while small on an annual basis, is not likely to follow an even pace. The response of consumers to the recent interest rate reductions has demonstrated not only their willingness to spend, but also their resolve to wait for discounts on prices and interest rates. Gone are the days when consumers felt pressured to act by ever-escalating prices. Today, consumers are more willing to engage in comparative price shopping and expect to be enticed by discounts on prices as well as interest rates. Rather than the consumer scrambling to keep up with price increases, now sellers must scramble to keep up with the more demanding consumer.

November 1985

The 1986 Economy

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Whether 1986 produces a 4 percent growth for the economy, as the administration projects, or something in the 3 percent zone, which seems to be about the median expectation of private prognosticators, will depend crucially on three inter-related matters. One is whether 1986 will see further declines in interest rates. The second is whether the year will see a significant strengthening of our external trade. And the third, and one which we must not ignore, is whether the price level will continue to behave. A moderate degree of optimism seems justified about all three.

Interest Rate Trends

There is, of course, the potential also for further domestic gains in the demand for output. Interest rates are already down and ought to move somewhat lower. The gap between current market rates and the rate of inflation still leaves a real interest rate of roughly 5 percent. In the two decades from 1950 to 1970 the real interest rate (measured as the difference between the yield on 10-year Treasury obligations and the rise in the consumer price index) averaged just over 2 percent. During the 1970s it was just under 1 percent, but this represented the usual tardiness of interest rates to adjust to accelerating inflation. While market interest rates also adjust tardily as inflation recedes, the expectation that inflation will remain in the 4 percent zone through the year suggests that there is room for market rates to move still lower as they establish real rates more in line with our history.

Moreover, Treasury financing requirements will be headed moderately lower as Gramm-Rudman begins to influence events. No one would pretend that this legislation represents an elegant or even orderly process of budgetary. There will be cuts made that should not occur, because politically they are easy, and cuts that should occur but do not, because they are politically sensitive. And in the end some additional revenue will probably be required for projected deficits to be reasonably in line with the legislation's targets. When the dust has settled, however, the management of the budget will have been nudged in the direction of greater fiscal discipline and smaller budget deficits. If so one of the pressures on U.S. credit markets will be headed toward some easing, with favorable (downward) effects on interest rates.

Monetary policy also has been accommodative in recent months, and this, at least for 1986, should make its contribution to economic expansion. While the economy seems to respond less predictably to changes in the money stock than was true in the 1960s and 1970s, no one would suggest that what is happening to the money supply is irrelevant to the economic outlook. And what is happening to the money stock (at least short-run) has to be put on the positive side. The conventional measure (M-1) rose during 1985 at a 14 percent rate, and the pace of this monetary expansion was quite steady except for a flat spot in October.

Lower interest rates should have favorably diffused effects across the economy, but these should be particularly evident in the capital budgets of businesses and in housing.

Businesses seem to be moving their hurdle rates (the minimum target rate of return on new projects) downward as market interest rates move to lower levels. And this should broaden the base of projects that businesses will now consider.

The response of businesses to more favorable credit markets must, however, be expected to be cautious. Profits of many industrial companies have been under pressure, particularly those in heavy industry, and the near-term outlook remains murky. Moreover, businesses face significant uncertainties about tax legislation, and uncertainty is never conducive to bold capital budgets.

Housing also has traditionally been sensitive to interest rates, and that should augur well as these rates move downward further. There is, however, some evidence that the response this time may be moderate by historical standards. Mortgage yields have already moved downward about 400 basis points from the high levels of 1982. Housing starts responded strongly for about a year, but since mid-1984 starts have remained essentially flat at roughly a 1.7 million per year rate. There should, however, be some further response to more attractive financing terms. The number of households is enlarging at roughly a 1.5 million per year pace. With even conservative assumptions about replacement of dwelling units demolished, in the wrong location, or otherwise removed from use, this means a basic market well above current levels of residential construction.

Trade Balance Trends

The most promising feature about the 1986 outlook is the possibility that at least by the latter half of 1986 our external trade will begin to turn in a more favorable direction. The ball-and-chain constituting a major drag on the current expansion has been, of course, the sharp deterioration in our foreign trade during the 1980s. During 1984, for example, the domestic demand for goods and services rose 6.2 percent, but domestic output rose only 4.7 percent. The impact of this has been particularly severe on manufacturing and agriculture. As we moved into this decade, U.S. exports of manufactured goods exceeded imports of these products by a modest amount. In the three-year 1978-80 period, for example, our net exports of manufactured goods were \$6 billion. By 1985 this had turned to a negative figure close to \$100 billion. And exports of farm products, in real terms, were 17 percent below the volume in 1978-80 (see Table 1).

The problem, of course, was caused by the 45 percent rise in the effective trade-weighted exchange rate of the dollar after 1980. Price tags denominated in D-marks or yen then looked quite attractive to Americans, but Germans and Japanese (and others) found that price tags denominated in U.S. dollars would cost a lot of their money.

The decline in the trade-weighted exchange rate of the dollar from its peak almost a year ago has probably set the stage for the beginning in 1986 of a significant turn-around in our external trade. And the September intervention in the foreign exchange markets did have the favorable effect of

TABLE 1. Measures of U.S. External Trade Position
(dollar amounts in billions)

Year	Balance on		Net Exports, Exports,	
	Cur. Acct.	Mdse. Trade	Mfg. Goods	Ag. Prod.
1978	\$ - 15.4	\$ - 33.9	\$ - 5.8	\$29.9
1979	- 1.0	- 27.5	4.4	35.6
1980	1.9	- 25.5	19.2	42.2
1981	6.3	- 28.0	12.0	44.0
1982	- 8.1	- 36.4	4.8	37.2
1983	- 40.8	- 62.0	- 31.2	36.1
1984	- 101.5	- 108.3	- 79.2	37.8
1985*	- 125.0	- 130.0	- 97.0	30.0

Source: Basic data, U.S. Department of Commerce

*Preliminary estimates based on incomplete data.

persuading many corporate executives that the administration was attempting to deal with the forces producing the trade imbalances rather than with the results. There is, of course, skepticism about whether our trade will show a substantial favorable response, and how soon. The dollar's exchange rate is still 10-15 percent too high. Companies forced to go off-shore for production will not now padlock those facilities and come back home. Lost markets are not quickly regained. History, however, is reassuring here. There have been other episodes when skepticism has been pervasive about whether economies would respond favorably to changed market conditions—but subsequently they did. By the latter part of this year, we can reasonably expect to see this once again.

Price Level Trends

As for the price level, the prognosis continues to be reassuring. It is true that the rate of inflation seems to have stabilized at about the 4 percent level, rather than the 2 percent more consistent with our history (see Table 2). And the declining import prices that have influenced favorably the domestic price level will not play their helpful role in 1986. Even so the price level ought to remain reasonably quiescent in 1986. Labor costs per unit of output are still rising at about 4 percent per year, and this establishes the basic path for the price level. Moreover, wage and benefit decisions have continued to be negotiated in the 3-4 percent range.

The Outlook

Will these forces produce a 4 percent increase in our output of goods and services from 1985 to 1986? This is within the range of what is possible but well toward the upper end of the range. There is, as it were, a problem of geometry

here. Since the rate of growth during 1985 was below 3 percent, an increase of 4 percent during 1986 would yield an increase of about 3½ percent in real GNP from the year 1985 to the year 1986. For this year-to-year increase to be 4 percent, the pace of expansion during 1986 would need to be about 5 percent. And more than half of that gain would probably have to be achieved in the second half of the year since the economy moves into 1986 at a sluggish pace. This is not impossible. These rates of growth have been achieved before. The target is, however, ambitious.

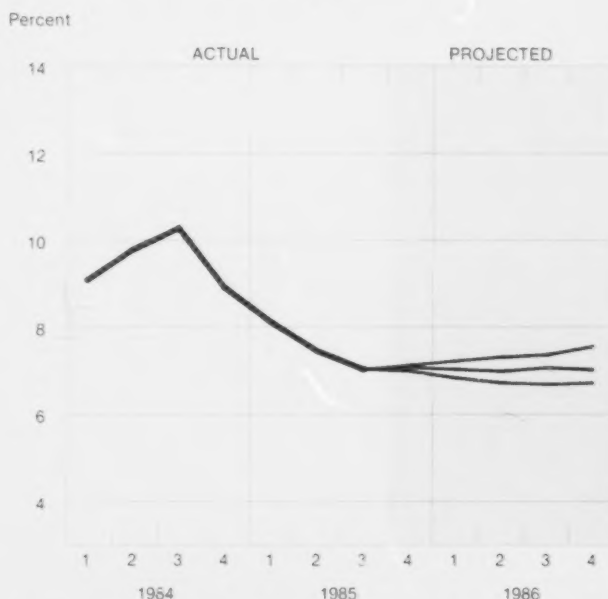
Two final quick comments. Beyond the usual policy problems of managing fiscal and monetary affairs, strengthening confidence in the price-level outlook, and expanding employment—which themselves can keep Parliaments, presidents, prime ministers, and their finance and economics ministers fully employed—two other matters must be kept in sharp focus.

1. There is still a debt or credit problem—international, agricultural, and in oil production areas. Depressions, in contrast to recessions, have usually been associated with serious financial disorder (e.g., the 1930s or 1907). The best way to avoid this is to be prepared to act decisively.

2. More explicit attention must be given to international economic policy. Washington must do a better job making it clear to the business community that it has a well-developed broad-spectrum policy. Frontal resistance to demands for trade protection are in order, but only part of a policy. There must also be policies to deal with the distortions and imbalances that produce these pressures for protection.

January 1986

3-MONTH TREASURY BILL RATE



Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

TABLE 2. Percent Change In Prices

Year	GNP	Imports	Exports
1981	9.3%	5.4%	8.0%
1982	6.3	- 1.5	2.3
1983	4.1	- 3.0	1.5
1984	4.2	0.6	4.7
1985*	3.5	- 2.0	—

Source: Basic data from the U.S. Department of Commerce. Computed from fixed-weighted indexes.

*Estimated using incomplete data.

Actual and Projected Economic Indicators

seasonally adjusted

SERIES FORECAST BY THE ASA-NBER PANEL															
ECONOMIC INDICATOR	Quarterly Data												Annual Data		
	Actual						Projected						Act'l.	Projected	
	84:1	84:2	84:3	84:4	85:1	85:2	85:3	85:4	86:1	86:2	86:3	86:4			
GROSS NATIONAL PRODUCT	3,553	3,645	3,695	3,759	3,811	3,853	3,916	3,981	4,041	4,013	4,177	4,252	3,663	3,891	4,142
GNP IMPLICIT PRICE DEFLATOR (index, 1972 = 100)	220.6	222.4	224.6	226.1	229.1	230.5	231.9	234.0	236.3	238.1	240.5	243.3	233.4	231.6	239.5
CORPORATE PROFITS AFTER TAXES	150.6	150.2	141.7	141.0	137.0	137.4	144.7	142.0	144.5	146.4	150.0	153.0	145.9	139.2	150.0
UNEMPLOYMENT RATE (percent)	7.87	7.50	7.47	7.20	7.33	7.30	7.13	7.10	7.10	7.10	7.10	7.05	7.51	7.20	7.10
INDUSTRIAL PRODUCTION (index, 1977 = 100)	119.3	121.4	123.3	123.1	123.8	124.2	124.7	126.0	127.0	128.0	129.3	130.0	121.8	125.0	129.5
NEW PRIVATE HOUSING UNITS STARTED (millions)	1.947	1.858	1.663	1.598	1.795	1.772	1.664	1.750	1.760	1.776	1.780	1.765	1.766	1.740	1.770
CONSUMER PRICE INDEX (% change from prior quarter or year)	5.29	3.74	3.67	3.54	3.30	4.17	2.39	3.20	3.50	3.70	4.00	4.15	4.28	3.40	3.55
3-MONTH TREASURY BILL RATE (%)	9.13	9.84	10.34	8.97	8.18	7.52	7.10	7.15	7.10	7.06	7.15	7.10	9.57	7.50	7.40
NEW HIGH-GRADE CORPORATE BOND YIELD (percent)	12.94	14.18	13.72	12.63	12.57	11.88	11.46	10.90	10.50	10.53	10.66	10.70	13.37	11.50	10.50
GNP IN 1972 DOLLARS	1,611	1,639	1,645	1,662	1,664	1,671	1,689	1,698	1,710	1,721	1,735	1,748	1,639	1,679	1,728
PERSONAL CONSUMPTION EXPENDITURES (1972 \$)	1,044	1,064	1,066	1,075	1,089	1,102	1,117	1,115	1,122	1,128	1,136	1,141	1,062	1,106	1,133
NONRESIDENTIAL FIXED INVESTMENT (1972 \$)	193.3	202.9	209.5	213.8	213.0	220.3	218.2	220.5	221.5	222.9	224.0	225.0	204.9	218.0	223.0
RESIDENTIAL FIXED INVESTMENT (1972 \$)	60.6	60.8	60.1	59.2	60.0	60.9	62.6	63.0	63.0	63.7	64.0	64.0	60.2	61.7	63.9
CHANGE IN BUSINESS INVENTORIES (1972 \$)	31.6	20.3	30.6	16.8	19.1	8.3	2.5	9.0	9.8	12.2	13.5	13.1	24.8	9.2	13.2
NET EXPORTS (1972 \$)	-8.3	-11.4	-27.0	-13.4	-28.4	-33.8	-38.4	-35.8	-33.7	-31.4	-29.3	-29.4	-15.0	-33.0	-29.6
FEDERAL GOVERNMENT PURCHASES (1972 \$)	112.2	123.2	125.0	129.6	129.8	129.7	141.3	138.0	137.0	138.3	140.0	140.9	122.5	134.1	139.5
STATE AND LOCAL GOVERNMENT PURCHASES (1972 \$)	177.3	178.9	181.1	180.9	180.9	183.9	186.2	187.0	188.0	188.2	189.0	190.0	179.5	184.8	189.0

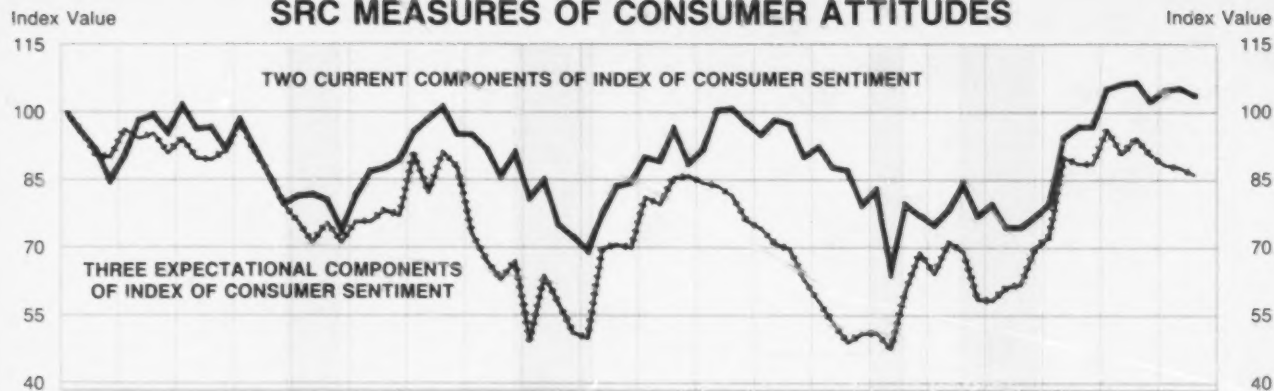
SERIES FROM THE CURRENT-DOLLAR GNP ACCOUNTS															
ECONOMIC INDICATOR	Quarterly Data												Annual Data		
	82:4	83:1	83:2	83:3	83:4	84:1	84:2	84:3	84:4	85:1	85:2	85:3	1982	1983	1984
GROSS NATIONAL PRODUCT	3,110	3,174	3,267	3,347	3,432	3,553	3,645	3,695	3,759	3,811	3,853	3,916	3,069	3,305	3,663
PERSONAL CONSUMPTION EXPENDITURES	2,046	2,070	2,142	2,181	2,230	2,277	2,333	2,361	2,396	2,446	2,493	2,539	1,985	2,156	2,342
GROSS PRIVATE DOMESTIC INVESTMENT	376.2	405.0	449.6	491.9	540.0	623.3	627.0	662.8	637.8	646.8	643.2	631.5	414.9	471.6	637.9
NET EXPORTS	6.3	19.6	-6.5	-16.4	-29.8	-51.5	-58.7	-90.6	-56.0	-74.5	-94.0	-104.0	19.0	-8.3	-64.2
GOVERNMENT PURCHASES	681.0	678.8	682.2	689.8	691.4	704.4	743.7	761.0	780.5	791.9	810.9	849.5	650.5	685.5	747.4
DISPOSABLE PERSONAL INCOME	2,238	2,261	2,303	2,367	2,429	2,502	2,554	2,606	2,645	2,655	2,727	2,711	2,181	2,340	2,577
PERSONAL SAVING RATE (% of disposable income)	5.8	5.7	4.2	5.0	5.3	6.1	5.7	6.3	6.2	4.5	5.1	2.7	6.2	5.0	6.1

Note: (1) All data are at annual rates and in billions of current dollars unless otherwise indicated. (2) Actual data through 1985:3 are those released by the Commerce Department in late November; projected data are from the ASA-NBER survey released in December.

Sources: Projections: American Statistical Association—National Bureau of Economic Research panel of forecasters.
Actual Data: U.S. Departments of Commerce and Labor, Board of Governors of the Federal Reserve System.

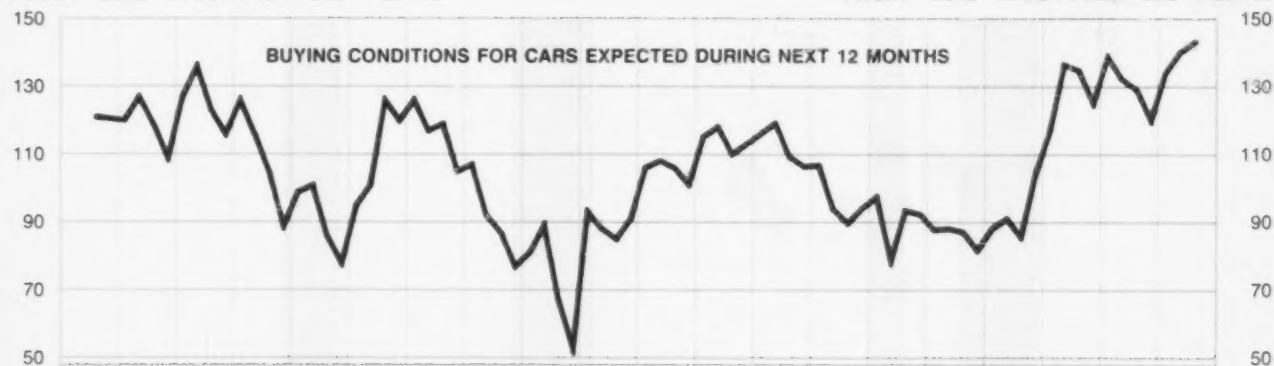
*Substantial revision of the data for variables marked with an asterisk has occurred since the last printing.

SRC MEASURES OF CONSUMER ATTITUDES



Percent "Good" Minus Percent "Bad" Plus 100

Percent "Good" Minus Percent "Bad" Plus 100



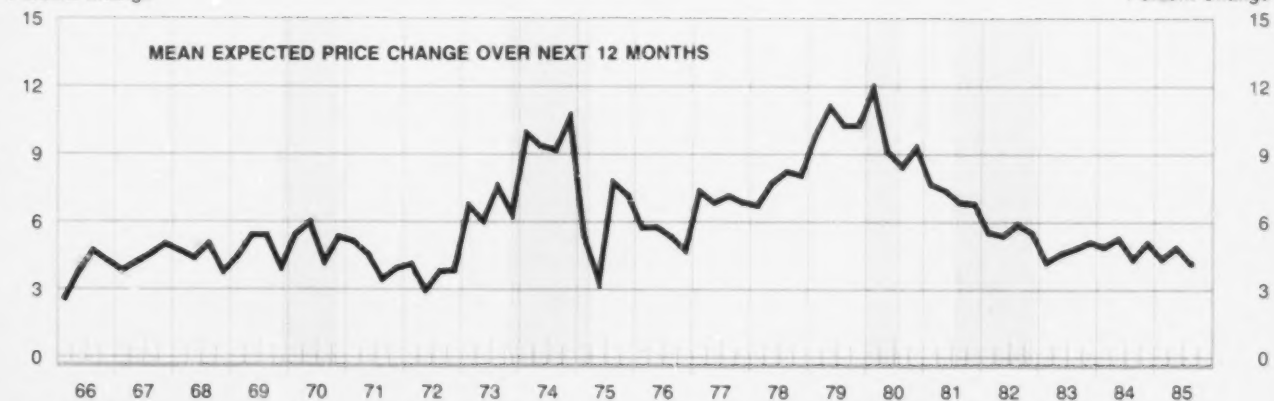
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Percent Change

Percent Change

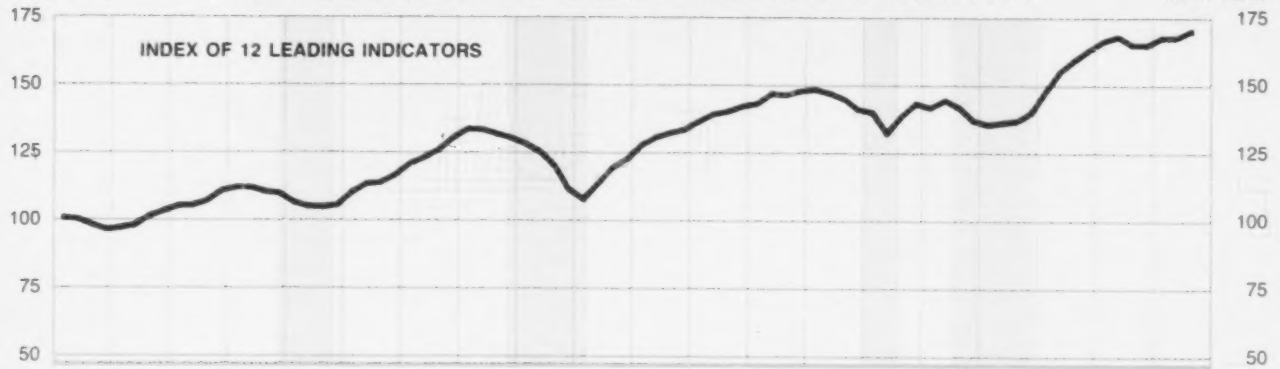


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MEASURES OF NATIONAL ECONOMIC ACTIVITY

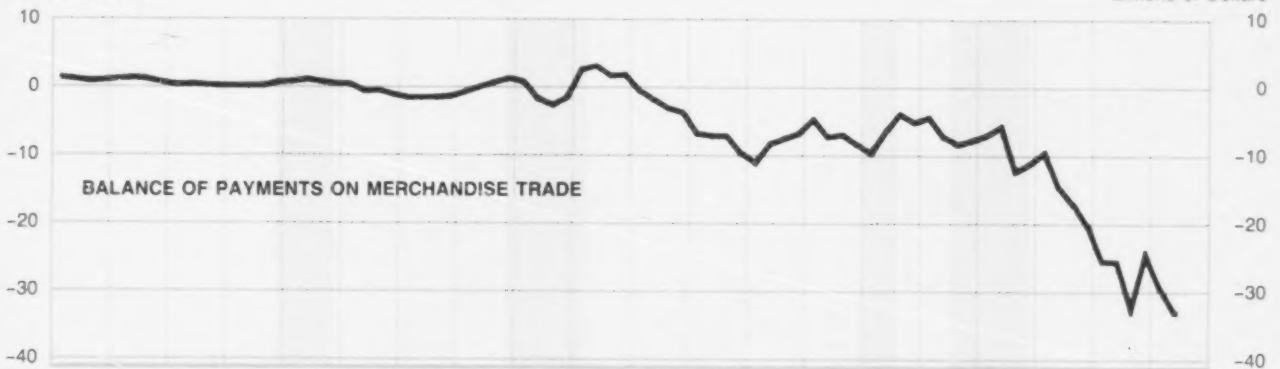
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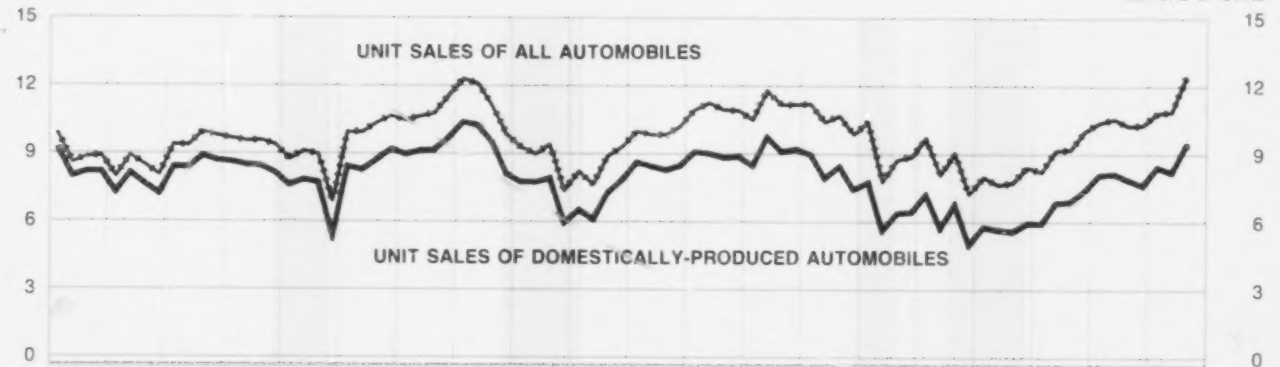
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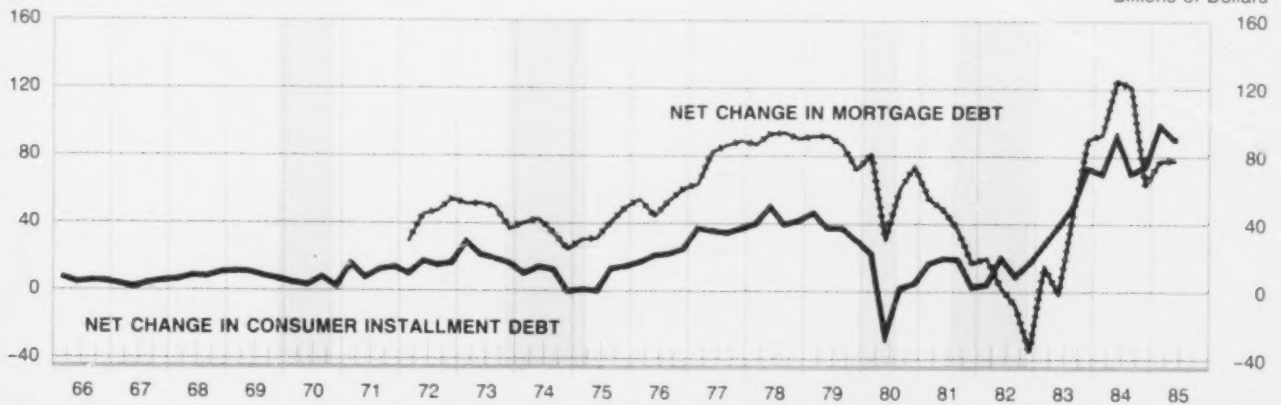
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Billions of Dollars

Billions of Dollars



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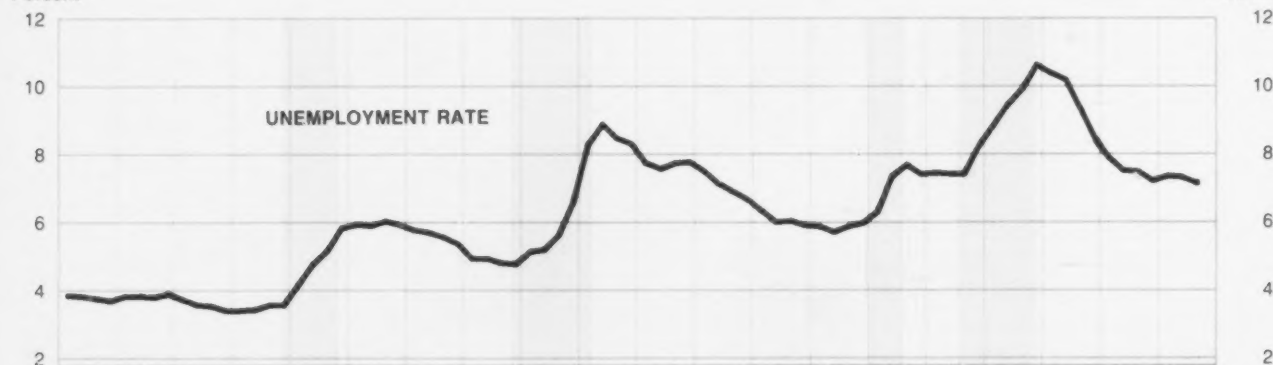
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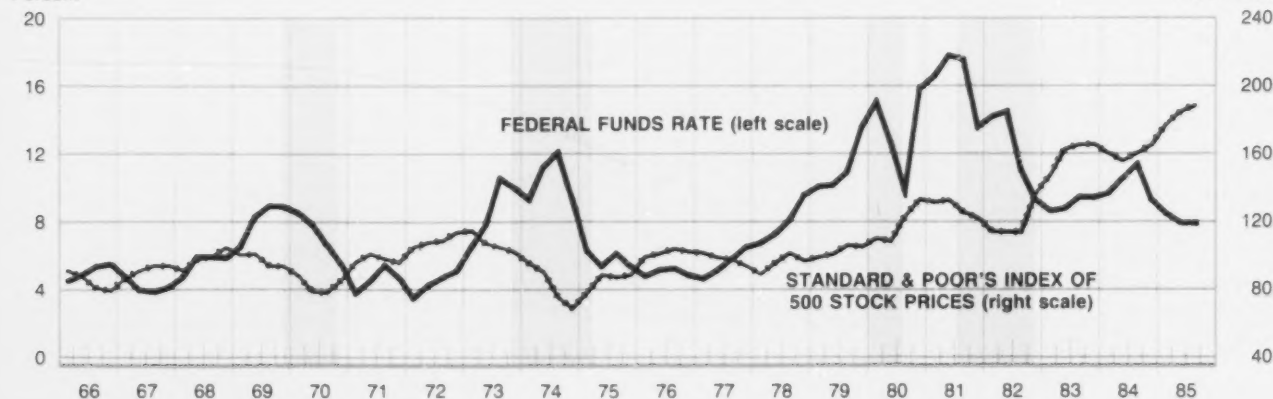
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Price Index



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Author Index to Volume 12 (1985)

Alwin, Duane F.	
Some Consequences of Recent Changes in Household Composition	2/39*
Caplan, Nathan; Whitmore, John K.; and Bui, Quang L.	
Economic Self-Sufficiency among Recently-Arrived Refugees from Southeast Asia	3/60
Cohen, Wilbur J.	
Reappraising Social Security Fifty Years Later	3/64
Crary, Joan P.; Howrey, E. Philip; and Hymans, Saul H.	
The U.S. Economic Outlook for 1985-86	1/3
Crary, Joan P., and Hymans, Saul H.	
The U.S. Economic Outlook for 1986-87	4/75
Curtin, Richard T.	
Improved Finances Sustain Consumer Optimism	1/17
Consumer Optimism Maintained	2/31
Buyer's Market: Discounts Become the Norm	3/51
1986 Prospects for Consumer Demand: Diminished but Still Favorable	4/87
Hymans, Saul H., and Crary, Joan P.	
Mid-Year Review and Forecast: The U.S. Economic Outlook for 1985-86	3/54
Juster, F. Thomas	
The Unbalanced Recovery	2/27
Gramm-Rudmanizing the Economy	4/84
McCracken, Paul W.	
A Recession Narrowly Averted?	1/15
The 1986 Economy	4/90
Thornton, Arland, and Freedman, Deborah	
The Changing American Family: Living Arrangements and Relationships with Kin	2/34
Zarnowitz, Victor	
The Surprises of 1983-84 and Scenarios for 1985-86	1/11

*Issue number/beginning page number

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Alan S. Blinder

The Policy Mix:
Lessons from the Recent Past

F. Thomas Juster

Prospects for Continued Recovery

Richard T. Curtin

Favorable Buying Attitudes
Reach New Peak

F. Thomas Juster

Preferences for Work and Leisure

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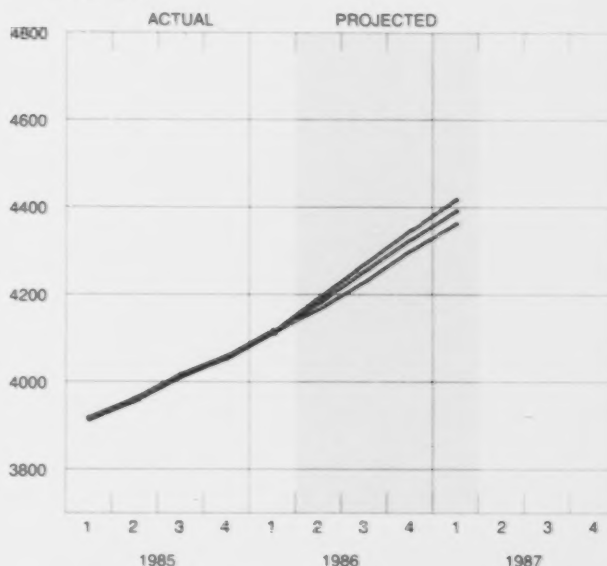
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ECONOMIC PROSPECTS: Actual and projected seasonally adjusted quarterly data at annual rates.

GROSS NATIONAL PRODUCT

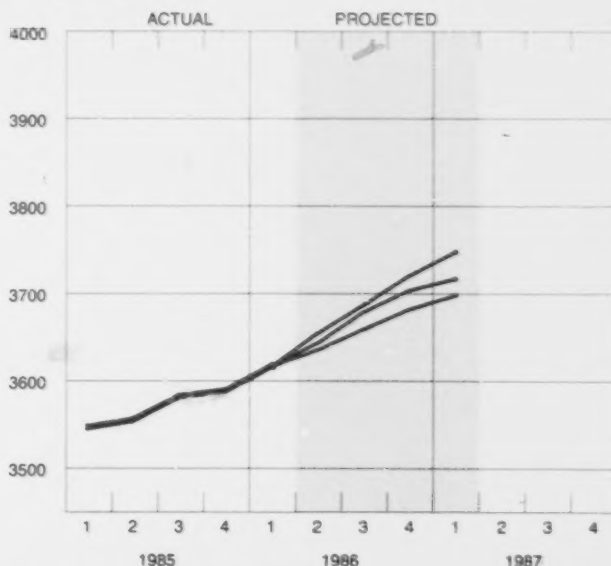
IN CURRENT DOLLARS
Billions of Dollars



Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

GROSS NATIONAL PRODUCT

IN CONSTANT 1982 DOLLARS
Billions of Dollars



Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

The Policy Mix: Lessons from the Recent Past*

Alan S. Blinder
Princeton University and
The Brookings Institution

"Experience is the name everyone gives to their mistakes."

—Oscar Wilde

The United States in the 1980s has been put through a great macroeconomic experiment as the policy mix has shifted dramatically toward easier fiscal policy and tighter money. These events invite a reexamination of prevailing views on the consequences of alternative policy mixes. Given what economists in 1980 believed about the policy mix issue, what seems to have been correct and what seems to be in need of revision?

The views of mainstream economists in 1980 can be summarized in four brief statements, recognizing that a "consensus" view does not mean unanimity.

1. Both monetary and fiscal policy affect both aggregate demand and the allocation of GNP among consumption, investment, and government.
2. The implications of any particular policy mix for real output and inflation depend only on the aggregate demand that is generated, not on the composition of that demand.
3. While monetary and fiscal policy are independent tools, one can dominate the other.
4. Given the perceived need to raise investment, a shift in the policy mix toward easier money and tighter government budgets is desirable.

In view of what has happened since, I hasten to add one more item to the mainstream story though, in fairness, it was not emphasized by American macroeconomists: the Mundell-Fleming analysis of the effects of fiscal and monetary policy on an open economy. With floating exchange rates and perfect international capital mobility,¹ fiscal stimulus is fully crowded out by currency appreciation that reduces net exports. Monetary policy, by contrast, is extremely powerful since national saving and investment responses to interest rate changes are very strong because of capital mobility. These results become less stark once we allow for imperfect capital markets or recognize that the U.S. is a "big country" that can move world income and interest rates. But, qualitatively, the Mundell-Fleming analysis leads us to expect stronger real effects (and a depreciating currency) from monetary expansion and weaker real effects (and an appreciating currency) from fiscal expansion, compared to what we would get in a closed economy.

There were, of course, dissenters from the mainstream view. Some argued that either monetary or fiscal policy did not have the strong macro effects claimed for it. More importantly, not everyone agreed that tighter fiscal policy and easier money was the correct recipe. Mundell (1971), dissenting from the view that only overall aggregate demand matters for prices and output, advocated a policy mix of tight

money to control inflation and tax cuts to spur real growth. Such a policy mix, Mundell pointed out, would cause the dollar to appreciate if exchange rates were floating. Feldstein (1980) later argued for the Mundellian policy mix on different grounds. By combining strong tax incentives for business investment with tight money, he argued, we could steer investment away from housing and into corporate capital formation while speeding up the disinflation process via an appreciating dollar.

The Reagan Experiment

The Feldstein-Mundell views on policy proved influential in the activist administration that took office in January 1981. This is not the place to offer a detailed description of Reaganomics, but three features bear directly on the policy mix. First, while the new administration promised to reduce both taxes and spending, it was clear from the start that the tax cuts were far larger than any conceivable cuts in government spending. Second, the tax cuts were structured to increase incentives for personal saving and for corporate investment. Third, the new administration vigorously supported the tight monetary policy that the Federal Reserve was already pursuing, including the Fed's putative conversion to monetarism.

In addition to ushering in a new policy, the Reagan administration discarded the received macroeconomic wisdom in favor of a new theory, whose analytical foundations were not well articulated. We can see this by contrasting the predictions of the new and old theories.

Mainstream economists basically saw Reaganomics as a strong fiscal stimulus bumping up against monetary stringency; the stronger arm would win. Hence the new policy could be expansionary (and inflationary) or contractionary (and deflationary) on balance. Though it was not really possible to predict which arm would prevail, many economists thought it would be fiscal policy. So there was much talk of Reaganomics being inflationary—talk which soon looked silly as inflation tumbled.

However, virtually all mainstream economists predicted that the mix of tight money and loose fiscal policy would drive up real interest rates. (Whether *nominal* interest rates would rise or fall depended on how quickly inflationary expectations would recede.) Apart from a strong stimulus to investment, not much was expected from the "supply-side" aspects of the tax cuts. Finally, those of us who thought much about the exchange rate (and it must be admitted that not enough of us did) anticipated an appreciating dollar for reasons Mundell had explained a decade earlier.

The administration's predictions were quite different, and seemed to be generated by the following simple model: if it is better for a variable to go up, it will go up; if it is better for a variable to go down, it will go down. Thus GNP growth,

*An earlier version of this paper was presented at the Conference on the Economic Outlook at The University of Michigan, November 22, 1985. I am indebted to Lori Grunin for research assistance.

¹The Mundell-Fleming analysis also covered fixed exchange rates and immobile capital. But the floating/mobile case seems most relevant to the 1980s.

the saving rate, and the share of investment in GNP were all predicated to rise while inflation, unemployment, interest rates, and the budget deficit were all slated to fall. The administration, to my knowledge, did not make much of the exchange-rate implications of its new policy mix in 1981. Subsequently, however, it welcomed the muscular dollar, which it interpreted as evidence that America was once again "standing tall."

Early Returns: 1981 and 1982

It was not widely perceived in 1981 and into 1982 that the early stages of Reaganomics mixed excruciatingly tight money with a promise of fiscal stimulus to come. Actual fiscal policy remained rather tight until mid-1982, the legacy of the Carter administration.

Table 1, which provides an estimate of the high-employment budget (a picture of the budget under assumptions of "full" employment) on a national income accounts basis, after correction for inflation accounting, makes this point clearly.² The years 1982 and 1983 are broken into half years to show the large mid-year changes in fiscal stimulus. As late as the first half of 1982, the high-employment budget was essentially balanced on an inflation-corrected basis; only in the second half of 1982 did the fiscal arm of Reaganomics come into play.

Meanwhile, monetary policy was becoming increasingly tight—at least in part by accident. As Table 2 shows, the behavior of M1 velocity was extremely erratic in 1981 and 1982. More significant than its volatility, however, is the fact that velocity declined in eight of the ten quarters from 1981:2 through 1983:3. During the critical five quarters from 1981:3 to 1982:4, velocity declined at a 5% annual rate—an unprecedented (until recently!) performance. Since the Fed was

²As usual, levels of such numbers are more controversial than changes, because the former depend heavily on the choice of a "high employment" benchmark. My benchmark unemployment rate is an average of the rather low 5.1% rate used by Eisner (1986) and the rather high rates (over 7%) now being used by the Federal Reserve Bank of St. Louis. Within-year patterns are based exclusively on the St. Louis Fed's quarterly series because Eisner's data are annual. Since the inflation adjustments come from Eisner, they are assumed to be the same in the first and second halves of each calendar year.

TABLE 1. The High-Employment Inflation-Corrected Budget, 1979-1985

Year or Half-year	Surplus(+) or Deficit(-)	
	Billions of Current Dollars	Percent of GNP
1979	+ \$24.0	+ 1.0
1980	- 20.5	- 0.8
1981	+ 19.4	+ 0.7
1982: 1st half	+ 0.7	+ .02
2nd half	- 59.1	- 1.9
1983: 1st half	- 44.5	- 1.4
2nd half	- 74.4	- 2.2
1984	- 99.3	- 2.7
1985: 1st half	- 109.9	- 2.9

Source: Author's computations based on inflation adjustment in Eisner (1986), as described in footnote 2.

Note: These estimates were made in the fall of 1985, prior to the benchmark revision of the national income accounts.

TABLE 2. Money, Velocity, and Income, 1981-1985 (seasonally adjusted annual growth rates)

Quarter	M1	M1 Velocity	Nominal GNP	Real GNP
1981:1	3.2	15.8	19.6	8.0
2	9.1	- 3.4	5.3	- 1.3
3	3.1	8.0	11.3	1.8
4	5.2	- 3.2	1.9	- 5.5
1982:1	9.1	- 8.6	- 0.2	- 6.2
2	2.9	3.1	6.2	1.1
3	6.1	- 3.4	2.5	- 3.0
4	17.3	- 11.2	4.2	0.6
1983:1	11.9	- 4.2	7.2	4.3
2	12.7	- 0.3	12.3	8.9
3	10.6	- 1.6	8.9	4.0
4	6.5	5.1	11.8	8.1
1984:1	6.4	10.0	17.0	11.4
2	6.7	2.3	9.1	5.1
3	4.6	1.3	6.0	2.1
4	3.3	1.0	4.3	0.5
1985:1	10.9	- 3.6	6.9	3.9
2	10.6	- 5.5	4.5	1.1
3	16.0	- 8.8	5.8	2.8
4	9.1	- 2.9	5.9	2.6

feigning attachment to monetarism at the time, falling velocity made monetary policy much tighter than intended.

With money stunningly tight and fiscal policy not doing much, the results were predictable: the economy stumbled in 1981 and fell in the winter of 1981-82. Though the Reagan administration had promised a boom and the Fed had sought to deliver a mild recession, the economy suffered a near-depression.

The conventional wisdom of 1980 held that tight money raises real interest rates and exchange rates. What happened to interest rates? Short-term interest rates peaked late in 1980, gyrated substantially without much trend until September 1981, and then fell sharply for a few months as the economy collapsed. In the first half of 1982, short rates rose and then fell with little net change despite a lifeless economy.

In evaluating these movements, it is important to note that actual, and presumably also expected, inflation was falling throughout this period. Hence the 12.5% three-month Treasury bill rate of June 1982 almost certainly represented a higher real interest rate than the 15% bill rate of January 1981. For real interest rates to rise as economic activity falls is extraordinary, and monetary policy must be held responsible. Seeing that nominal interest rates were falling, the public concluded that mainstream economists (who had predicted rising real rates) had gotten it all wrong. The president did all he could—which was quite a lot—to deepen the confusion between real and nominal rates.

Long-term interest rates climbed more or less steadily throughout 1981 and were fairly constant during the first half of 1982. Here we can be less vague about the behavior of real rates, since economist Richard Hoey has compiled a time series of direct observations on expected 10-year inflation from a poll of financial decision makers.³ According to these

³The data can be found in the Drexel Burnham Lambert, Inc. "Decision-Makers Poll," September 17, 1985.

data (see Chart 1), the real 10-year government bond rate rose from a low of 1.6% in June/July 1980 to 4.3% by January 1981. As the Reagan program was wending its way through Congress, the real 10-year rate rose to a high of 8.3% by September 1981. After that, it declined to a bit over 7% in the first half of 1982.

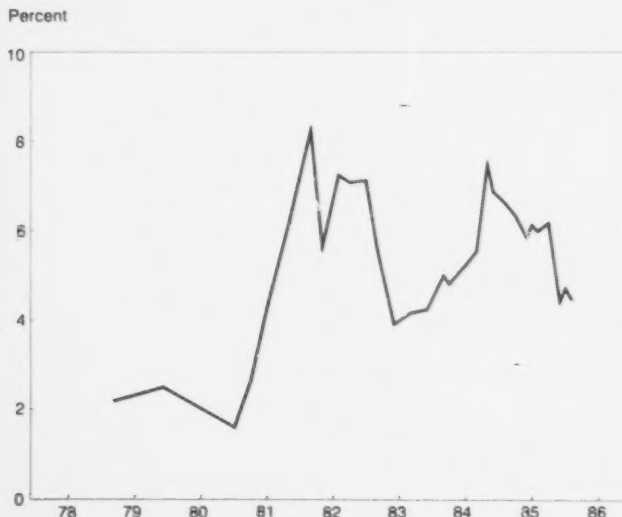
Like interest rates, the exchange rate began rising before President Reagan was elected—around July 1980 or so. According to the Fed's multilateral weighted index, the dollar was already up 8% from its trough by the time Reagan took office; and it gained another 23% while the Reagan tax cuts were being proposed, debated, and enacted (see the second chart on p. 22). This is exactly as the Mundell-Fleming analysis predicts; but the sharpness of the dollar appreciation (and, subsequently, its persistence) surprised most observers. Net exports started to deteriorate promptly, dropping from \$38 billion (in 1982 dollars) in 1980 to \$26 billion in 1982. But capital inflows were not yet a salient feature of U.S. economic performance.

The reasons why capital inflows were not yet needed are apparent in Table 3, which shows (as a percentage of GNP) the components of the major sources and uses of funds in the economy. Net government saving is defined as the consolidated surplus of all levels of government, net household saving is the excess of personal saving over investment in housing, net business saving is the excess of gross business saving over gross business investment, and net capital inflows are the (negative of) net foreign investment in the national accounts.⁴

The table tells the following story. In 1981, the government borrowing requirement of 1% of GNP was easily supplied by households because investment in housing was so weak. The business and foreign sectors were essentially balanced. In 1982, the Reagan tax cuts and the worsening recession pushed government borrowing up to 3.5% of GNP.

⁴These data do not actually sum to zero owing to the statistical discrepancy and rounding error.

CHART 1. Real Ten-Year Government Bond Rate



Source: Drexel Burnham Lambert Incorporated.

**TABLE 3. Balance of Savings and Investment
(as a percent of GNP)**

Year	Net Gov't. Saving	Household Saving (less investment)	Business Saving (less investment)	Net Capital Inflows
1980	-1.3	0.5	1.0	-0.5
1981	-1.0	1.2	-0.1	-0.3
1982	-3.5	1.5	1.9	0.0
1983	-3.8	-0.6	3.5	1.0
1984	-2.9	-0.2	0.7	2.4
1985	-3.5	-1.4	1.9	2.8

But this large increase in government borrowing was met by domestic lending. Households provided an amount equal to about 1.5% of GNP, despite a slight decline in the personal saving rate, because housing was even weaker in 1982 than in 1981. Business saving provided the remaining 1.9% of GNP as tax cuts raised depreciation allowances while the recession killed business investment.

Lessons from the Recession

What did the experience of 1981 and 1982 teach us about the policy mix? First, we learned that monetary policy can have potent effects that work through the exchange rate, as Mundell had suggested. By mid-1982, no one was talking about monetary policy being the weak sister of stabilization policy. With the magnificent wisdom of hindsight, the fears in 1981 that expansionary fiscal policy would overwhelm the Fed look downright quaint.

Second, we began to learn that the traditional allocative breakdown of GNP into consumption, investment, and government purchases was inadequate. The little tail of net exports could wag the entire dog, even in a country as large as the United States. As Table 4 shows, between 1980 and 1982 consumption crowded out net exports much more than it crowded out business fixed investment. (And, of course, there was more to come.)

Finally, events threw a new question into the policy mix hopper: what happens if expansionary fiscal policy is announced now, to take effect at a future date? A tentative answer soon became part of the oral tradition of mainstream macroeconomics: expected future deficits, by raising long-term interest rates, might actually reduce aggregate demand at first. The idea that the "expectational" fiscal multiplier could be negative was subsequently formalized by Turnovsky and Miller (1984), Blanchard (1983), and others. As Turnovsky and Miller made clear, the logic of the argument requires that future fiscal stimulus expand future GNP; if not, higher future short rates will not be anticipated and current long rates will not rise.

To be contractionary when it is announced, a future fiscal stimulus must twist the term structure of interest rates—raising long rates even though short rates might fall. Did this happen in the United States when the Reagan policy was announced? Chart 2 shows that it did. The term structure had a pronounced negative slope in January 1981. But during 1981 short rates fell while long rates rose, leading to an upward-sloping term structure by December 1981 (see panel a). Panel b shows that the switch from a mostly downward-sloping to a mostly upward-sloping term structure occurred immediately after the Reagan tax cuts were passed by Congress. Since all

**TABLE 4. Composition of Real Final Sales
(percent)**

Component	Average 1970-1979	1980	1981	1982	1983	1984	1985
Consumer Expenditures	63.2	63.2	63.2	64.3	65.4	65.4	64.8
Fixed Investment	15.8	16.3	16.2	14.8	14.9	16.4	16.6
Business	10.8	11.8	12.2	11.5	10.5	11.5	11.9
Housing	5.0	4.5	4.0	3.3	4.5	4.8	4.7
Government Purchases	20.3	19.4	19.4	20.1	19.8	19.9	20.4
Net Exports	0.8	1.2	1.1	0.8	-0.2	-1.6	-1.9
Exports	9.1	12.8	12.6	11.3	10.4	10.4	9.3
Imports	8.3	11.6	11.5	10.5	10.5	12.0	11.2

this predates the loosening of monetary policy, there is at least a good chance that fiscal policy was the culprit.

After the Fall: the Recovery through Mid-1984

Fiscal policy turned sharply expansionary when the second stage of the Reagan tax cuts became effective in mid-1982. As Table 1 shows, the high-employment inflation-corrected budget went from balance in the first half of 1982 to a deficit of almost \$60 billion in the second half, and then to a deficit of almost \$100 billion by 1984. While the precise numbers are subject to debate, the fiscal stimulus was extreme by any standard.

However, the nation managed to avoid the grand collision of fiscal stimulus with monetary restraint because the Fed turned expansionary at just about the same time. The annual growth rate of M1, which was only 2.9% in 1982:2, rose to 6.1% in 1982:3 and then to a stunning 17.3% in 1982:4 as the Fed began to realize what its super-tight policies had wrought (see Table 2). For the full year 1982:3-1983:3, the M1 growth rate was 13.1%—enough to make monetarists shriek⁵ and to push interest rates down sharply. The three-month Treasury bill rate fell from 12.5% to 7.7% between June and October 1982, and then bottomed out. Long-term rates fell nearly as much; the 10-year government bond rate dropped from 14.3% to 10.9% over the same four months. Little of this decline in nominal interest rates can be attributed to expected inflation. According to Hoey's survey data (see Chart 1), the real 10-year bond rate declined from 7.15% in July 1982 to 3.9% by December 1982. Thus was depression averted.

Conventional macro theory says that a mix of expansionary monetary policy and expansionary fiscal policy should raise real GNP strongly and have uncertain effects on real interest rates. That is more or less what happened in the early part of the recovery. From the first quarter of 1983 through the second quarter of 1984, the economy boomed at a 7.9% annual rate, which had supply siders crowing in the *Wall Street Journal*. Both long-term and short-term interest rates fell to troughs in early 1983 and then began to rise—a rise which continued until mid-1984.

The behavior of the exchange rate was a bit more puzzling. According to the Mundell-Fleming analysis, the expansionary fiscal policy should have made the dollar appreciate—and

it did. But the upward march of the mighty dollar was barely interrupted by the sharp decline in interest rates between 1982:3 and 1983:1.

In early and mid-1983, many mainstream economists voiced concern that rising real interest rates would damage investment as the economy strengthened—unless the Fed proved more accommodating than anyone expected. We had never experienced a vigorous recovery with such high real interest rates before, and many economists wondered out loud whether we could. The Fed did not surprise us in this regard, and real interest rates rose throughout 1983 and into 1984 (see again Chart 1). But investment was not crowded out. Instead, as Table 4 shows, the share of fixed investment in real final sales rose between 1982 and 1984 even though the share of consumption also rose. Room was made by the sharp drop in net exports from 0.8% of real final sales in 1982 to -1.8% in 1984. The surprise was that the tax cuts crowded out exports, not investment.

Lessons from the Boom

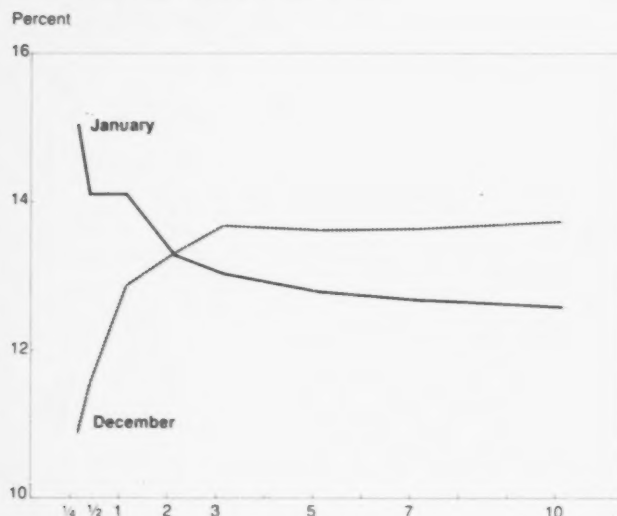
The boom that lasted from early 1983 to mid-1984 taught us three principal lessons about the policy mix. First, it is now abundantly clear that the economy, including its interest-sensitive components, can grow rapidly in the face of very high real interest rates—especially when it is snapping back from a deep recession. Many mainstream economists doubted this in 1983, but their gloom and doom now seems misplaced.

Second, we learned what many nations knew already: that it is possible to live on borrowed funds for a while. Look at Table 3, which shows the balance of saving and investment. As the recovery progressed from 1982 to 1984, the structural deficit rose and the cyclical deficit fell, leading to little net change in the government's borrowing requirement. But the mode of financing changed radically—from almost completely internal financing in 1982 to predominantly external financing in 1984. With housing booming in 1983, the household sector was a net user of funds; but business financed most of the government deficit as investment remained depressed while after-tax profits rose. During the investment boom of 1984, however, the surplus of the business sector fell from 3.5% of GNP to under 1%, so the U.S. had to borrow 2.4% of GNP from abroad—the most in postwar history. Most observers agree that these capital inflows kept U.S. interest rates lower than they otherwise would have been and redirected crowding out from investment to net exports.

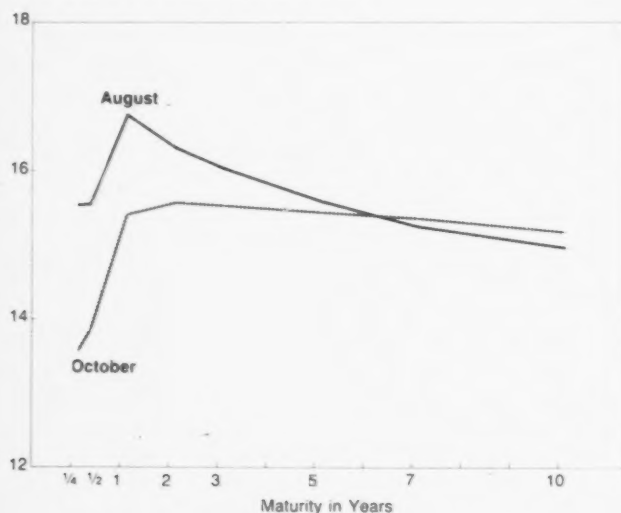
⁵And to forecast a resurgence of inflation within 12-18 months! Mainstream economists, who used Phillips curves rather than money growth rates to forecast inflation, did much better.

CHART 2. Term Structure of Treasury Securities

A. January 1981 and December 1981



B. August 1981 and October 1981



Third, we learned that the policy mix can influence inflation, even given the level of aggregate demand. While there is considerable dispute over the precise magnitude, the dollar appreciation probably reduced the price level by 3-8 percent over a period of four years or so, thereby reducing the average annual inflation rate by at least three-fourths of a percentage point and perhaps by as much as 2 percentage points.⁶ Mundell was right: the mix of tight money and loose fiscal policy eased the pain of disinflation by appreciating the dollar. Of course, if the dollar cannot remain this strong forever, the disinflationary gains will have to be given back eventually. So we can debate the merits of Mundell's (and Feldstein's) normative economics. But the validity of their positive economics has been demonstrated.

⁶See, for example, the range of estimates offered by Bryant (1985) or Sachs (1985), where several other studies are cited.

What Have You Done to Us Lately?

How can we characterize the policy mix that has prevailed since mid-1984? The fiscal stance is clear. As Table 1 shows, fiscal stimulus increased from 1983 to 1984 and was almost the same from 1984 to the first half of 1985.

Monetary policy is harder to appraise, or even to describe. Targeting on the money supply, or even paying lip service to monetary targets, has been abandoned by the Fed in stages. So we probably should not make too much of the fact that M1 grew at a 3.9% annual rate during the last half of 1984 and then at a 12.5% annual rate during the first three quarters of 1985. It is also clear that the Fed has not tried to keep interest rates constant. Both short- and long-term rates have fallen dramatically since mid-1984. Since little of this decline can be attributed to lower expected inflation, real interest rates have fallen, which suggests easy, or at least easier, money.

Some observers claim that the Fed has been targeting the growth rate of nominal GNP lately. And quarterly growth of nominal GNP has indeed been relatively steady since 1984:2 despite extraordinary gyrations in velocity (see Table 2). A potentially better characterization, it seems to me, is that the Fed now seeks to sustain real growth of about 3% per annum, that is, a constant unemployment rate around 7%, as long as inflation remains quiescent. In the second half of 1984, it could accomplish this objective with relatively little money growth, thereby keeping monetarists happy. But as velocity plunged in 1985, sustaining real GNP growth required extremely high M1 growth rates.

It is instructive to compare the recent experience with the four critical quarters from 1981:3 to 1982:3. In the earlier period, velocity declined 3.1% and the Fed permitted only 5.8% growth of M1. So nominal GNP grew only 2.6%, real GNP declined 3.4%, and we had a catastrophe on our hands. In the three quarters from 1984:4 to 1985:2, velocity declined at a 5.2% annual rate, but the Fed pushed the annual money growth rate up to 11.6%. Hence nominal GNP grew at a 5.8% rate and real GNP at a 2.6% rate. The Fed certainly seems to have learned from its experience.

For present purposes, the important point is that GNP targeting—whether nominal or real—implies that monetary policy dominates fiscal policy as a stabilization tool. As long as the Fed maintains this policy stance, changes in fiscal policy will have only allocative, not macro, effects.

How Should We Modify Our Views on the Policy Mix?

In a sense, we have now come full circle. At the end of Jimmy Carter's presidency, almost everyone thought we should shift the policy mix toward tighter fiscal policy and easier money. Now, almost everyone thinks that again. But much about our views on the policy mix has changed in the past five years. I would like to close by highlighting several aspects of this transformation.

Allocation: When we consider the allocative effects of the policy mix, we must now think first of the exchange rate and choosing between domestic demand and exports, and only later about real interest rates and choosing between investment and consumption. This requires a major change in thinking for Americans; but recent experience dictates it. For we have seen that swings in exchange rates can dwarf swings

in real interest rates in a world of floating exchange rates and international capital mobility. And we have been reminded that decades of econometric evidence suggest that net exports are far more price-elastic than is domestic investment.

Dominance: It now appears that a determined monetary authority can overwhelm the macro (but not the allocative) effects of even very strong fiscal policies. I do not think many economists thought this at the start of the Reagan experiment, but two developments call for a change of views. First, it now appears that what Mundell and Fleming taught us years ago about floating exchange rates applies even to the mighty U.S. economy. Second, GNP targeting by the monetary authority has the effect of vitiating the macro effects of fiscal policy.

The Assignment Problem: Putting these two observations together suggests a new version of the "assignment problem" of Mundell: monetary policy can be used to control the size of GNP while fiscal policy controls its composition. Whether this assignment of instruments to goals is desirable or not is another question entirely, given that fiscal and monetary policy are in different hands in the U.S..

The Optimal Mix: And, finally, there is the issue of the optimal policy mix. Feldstein and Mundell were proven right in part. The mix of tight money and loose fiscal policy through tax cuts does indeed appreciate the currency, which assists in disinflation. But it also decimates the tradable-goods sector, brings on protectionism, and may ultimately prove damaging to investment if and when international capital flows peter out. In the end, I wind up thinking that the old-fashioned mix of easy money and tight budgets looks better. Some things don't change.

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Prospects for Continued Recovery

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Introduction

At the end of last year, most observers of the economy expected modest continued growth in the 2-3 percent zone during 1986, with some looking for 4 percent or better real growth and a few anticipating little or no growth. Since then, significant and largely unexpected developments have unfolded, which by and large should have moved all the forecasts up a notch—or more than a notch. The most important developments are clearly interrelated—the striking decline in oil prices, the associated decline in both short- and long-term interest rates, and the extension of a stock market boom of major dimensions. Over the last several months, forecasters have thus been scrambling to redo their estimates of real growth and inflation, as oil prices continued to weaken and interest rates continued to fall—both well beyond any plausible projection dating from the end of last year.

The Case for Optimism

The most common view among members of the forecasting fraternity oriented to econometric models is that the recent declines in oil prices and interest rates have bumped up predictions of economic growth by something like one percentage point in 1986 and by close to two percentage points in 1987. The rate of price inflation drops a couple of percentage points each year, and the unemployment rate edges down—more in 1987 than 1986. Altogether, a happy scenario, considering the advanced stage of the economic expansion.

Results of this sort are obtained by simply grinding through the impact on major economic variables of the oil price decline. While it is unclear exactly where oil prices will stabilize, most analysts pick a figure for dollars per barrel of oil somewhere in the mid-teens as a reasonable basis for estimating crude oil prices over the next several years. That price decline, coupled with weakness in commodity prices generally, has significantly strengthened the view that inflation rates will continue to head down, and in turn the continued disinflation is one of the driving forces behind the sharp decline in interest rates over the last several months. The declines in oil prices and interest rates give consumers more spendable income, boost the demand for housing (with reasonable certainty) and for business capital goods (with less certainty as to both magnitude and timing), and provide monetary policy-makers with more room for maneuver—policy has less need to be concerned with the inflationary consequences of easier money.

Once these changes in the prices of oil and money are processed through the system, the outcomes are both positive and quite large, and tend to swamp the negative fiscal impact built into most forecasts by the Gramm-Rudman-Hollings Balanced Budget Act, which can be expected to tighten fiscal policy significantly in the fall of this year. And even the most recent news with significant economic implications—the Libyan air strike with its apparent influence on the willingness of Americans to travel abroad—seems to have positive if minor economic consequences: fewer

Americans traveling abroad will mean fewer purchases of services from foreigners and, presumably, more purchases of services domestically as vacation and travel plans are switched from abroad to home, an event which should have a small but measurable impact on the net foreign trade balance.

Are there any glitches in this picture of renewed economic growth? As usual, there are, starting with the simple proposition that there are no guarantees that the positive effects of lower oil prices will be the mirror image of the negative effects that we came to know so well from the experience of the 1970s. The econometric models must be feeding largely on information from the 1970s relating to the impact of oil price changes on economic activity, in order to estimate the impact of the oil price declines that have occurred during recent months—there is no other data base from which the economic consequences of oil price changes can be estimated.

While it is true that oil price changes do affect the economy, and that some of the consequences of the oil price increases of the 1970s should be mirrored by the opposite consequences when oil prices decline, nothing guarantees that economic responses are symmetrical. Certainly, in the short run, there are visibly negative consequences to the sharp decline in oil prices—witness the drop in employment in the oil fields in Texas, Louisiana, and Oklahoma, the sharp decline in the operation of drilling rigs in those areas, the possible consequences for banks whose portfolios are heavily loaded with energy loans, and the consequence of sharp oil price declines for Third World countries that are heavily dependent on export earnings from oil. Thus one part of the current economic scene is that some of the negative consequences of the decline in oil prices are already showing up in the data, while many of the positive influences will show up only with a considerable lag.

The Case for the Pessimists

While forecasts based on large-scale econometric models are uniformly optimistic about the economy over the next several years, observers who use less formal procedures are apt to include at least some who see distinct signs of weakness in the economy, and who are not yet convinced that renewed growth is imminent. If one looks closely at recent developments, it is tempting to say that the economic data currently available show a curiously dichotomous picture. On the one hand, most variables that reflect a price phenomenon—commodity prices, consumer prices, stock market prices, interest rates (the price of money), exchange rates (the price of foreign currency)—show movements that are judged to be positive for the U.S. economy. On the other hand, much of the data reflecting changes in the real sector of the economy do not appear to be quite so strong, and some of them are distinctly on the weakish side. For example:

- Automobile sales, despite sharply declining interest rates and strong financial incentives provided by the manufacturers, have declined during recent months to an overall rate of under 10 million units per year, while domestic

sales have been even weaker at between 7 and 8 million units.

- Industrial production has shown a couple of months of decline and is only slightly higher than a year ago.
- Retail sales have shown no strength at all during recent months, partly reflecting the weakness in automobile sales.
- Capacity utilization in manufacturing is declining rather than advancing and is at a lower level than 12 months ago.
- Employment changes, while behaving erratically, appear to be better characterized as sluggish than vigorous.
- Unemployment, after a couple of months under 7 percent, is back up at its last year's level of over 7 percent.
- There is no evidence as yet that business investment plans have been improved much by the better financial climate for such decisions, and some sectors—notably oil—have cut investment plans sharply.

What are we to make of this mixed bag of price and quantity statistics? One interpretation is that the positive real effects to be expected from declining oil prices, continued disinflation, and declining (or low) interest rates are future events and have not yet emerged in the current data. But the positive effects will be strong, they will inevitably appear shortly, and it is premature to expect much in terms of a reflection in current output and employment growth. In particular, since some of the short-term consequences of oil price declines are known to be negative and those negative effects have been dominating the current data, the data will soon begin to look better as the negative effects fade and the positive effects begin to take their predicted course.

That is certainly a plausible story. However, the fact that it is plausible does not necessarily make it right. The pessimistic view would probably say that housing is the only significant area where we can expect declines in interest rates to exert a major influence on spending decisions. While some positive effects will be seen in housing, they will not be strong and they cannot carry the capital goods sector. In the pessimistic view, the effects of interest rate declines on business capital spending cannot be expected to be dramatic, since they never have been. Moreover, capacity utilization is pretty low, thus there is lots of excess capacity around and no particular urgency to phase in major investment projects—even with the attraction of low borrowing costs. In the consumption sector, things have been sluggish for awhile, and there is no good reason to expect otherwise. While consumer attitudes are certainly favorable, they are not becoming more favorable, and it is change in optimism that drives consumer spending. And in the public sector, the only certain event is that whatever level of fiscal stimulus is being provided currently, less will be provided later on this year as the Gramm-Rudman-Hollings targets (or their negotiated equivalents) come into play. In some respects, the pessimistic story is basically a quite old-fashioned one—the main positive driving force in the system currently is monetary policy, and

monetary policy does not guarantee stronger economic growth if potential borrowers see no need to borrow.

Which of these stories makes more sense? Probably something toward the more optimistic part of the range. We certainly ought to be getting some net positive impact from the very favorable events of the break-up of the OPEC cartel, the decline in oil prices, and the resulting impact on inflation generally and on interest rates. But those effects may not be quite so strong as the models appear to be predicting, and they may be more deferred in time than the models are suggesting. On the other hand, it is entirely reasonable to expect that whatever positive repercussions ensue from these major events will take some time to unfold, and therefore it's not that all unsettling that we can find so little evidence of it thus far in the data.

Some Final Comments

A worrisome feature of the present expansion is the failure of productivity to rise much during the last several years. What the data seem to be showing is that manufacturing productivity is behaving about as it has during past expansions—growing at reasonable rates, and continuing to grow as the expansion matures. But nonmanufacturing productivity has hardly grown at all over the entire expansion period—after showing a normal growth in the very early stages of expansion back in 1983, nonmanufacturing productivity has actually declined slightly. Overall, productivity growth can only be characterized as disappointing (see the second chart on p. 23).

A measure of the degree to which we have lowered our sights on productivity is that an optimistic scenario these days is output growth of something like 4 percent per year, consisting of about two and a half percentage points in employment and hours growth, and another one and a half percentage points in the growth of output per man hour—the conventional productivity measure. A pessimistic view might be a trend growth rate of output little more than 3 percent.

To recall just how far from past experience those numbers are, the reader should recall that productivity growth during much of the decade in the 1960s was running at an annual rate of about 4 percent, with growth in real output a couple of percentage points higher due to hours and employment growth.

Overall, productivity probably represents a more important economic problem than whether we have a vigorous recovery this year or a sluggish one. Over long spans of time, differentials of one or two percentage points in productivity growth add up to the difference between our national ability to solve a great many pressing economic, social, and political problems and our inability to do much more than decry their existence. Whatever may be said about the successes or failures of current economic policy, our current inability to restore vigor to productivity growth must surely rank among the major disappointments.

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Favorable Buying Attitudes Reach New Peak

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In the first quarter 1986 survey, the Index of Consumer Sentiment was 95.5, up from 91.1 one quarter earlier, and 94.5 one year earlier. The recent improvement has been due to the establishment of new record levels in favorable buying attitudes. The current reading is only 5 Index-points below the cyclical peak of 99.5 recorded two years earlier in the first quarter of 1984. This small decline over the past two years reflects concerns about the vitality of the domestic economy. These concerns are almost entirely focused on future employment prospects, since expectations for inflation and interest rates remain favorable.

Among families with incomes of \$30,000 or more, the Index stood at 106.8 in the first quarter 1986 survey, up from 102.1 one quarter earlier, but below the 111.6 recorded one year earlier and the cyclical peak of 115.9 recorded two years earlier. The first quarter improvement in consumer sentiment over year-end 1985 levels was widespread across all major geographic regions, age, and income groups.

Favorable Buying Attitudes Set New Records

Favorable attitudes toward buying conditions for homes, vehicles, and large household durables reached new all-time record levels at the start of 1986, due to the widespread availability of price discounts and reductions in interest rates. More families than ever mentioned interest rate reductions, and fewer families complained about high prices than at anytime since the mid-1960s.

Vehicles. Favorable attitudes toward buying conditions for vehicles were held by 72 percent of all families in the first quarter 1986 survey, the highest proportion recorded in more than thirty years. This is the third time that a new record level

has been set since the recovery began. The prior peaks were 67 percent recorded in mid-1985, and 65 percent in 1983. Overall, this has been the most favorable three-year period for vehicle buying attitudes since the 1960s.

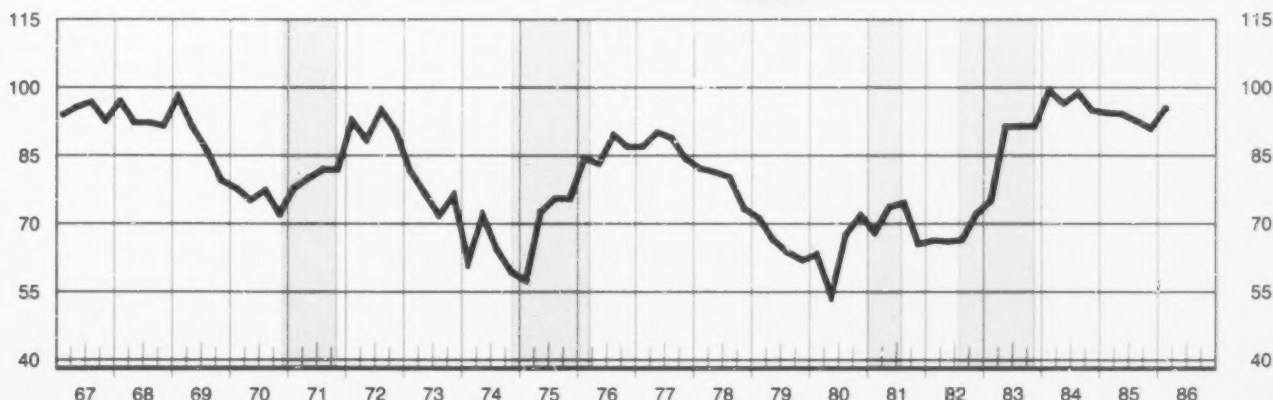
Reduced interest rates on vehicle loans have been the primary factor behind these very favorable buying attitudes. Among all families in the first quarter 1986 survey, 51 percent cited interest rate reductions as the reason underlying their favorable evaluation, more than twice the 22 percent recorded one year earlier, and the highest proportion ever recorded. Complaints about high interest rates were made by only 3 percent of all families in the first quarter 1986 survey. In comparison, five years ago, when half of all families rated vehicle buying conditions unfavorably, 25 percent complained about high interest rates, while just 2 percent favorably mentioned interest rates.

Perceptions of market prices for vehicles also remained very favorable in the first quarter 1986 survey. Complaints about high vehicle prices were made by just 13 percent of all families in the first quarter 1986 survey, down from 21 percent one year earlier, and the lowest proportion recorded since the mid-1960s. However, references to the availability of price discounts were made by 22 percent of all families in the first quarter survey, somewhat below the 27 percent recorded one year earlier.

Retail sales of new vehicles during the past three years have reflected these very positive trends in buying attitudes. The number of vehicles sold in 1985 was about 50% higher than three years earlier. From the 1982 recession low of 10.4 million units, vehicle sales rose by 2 million units in both 1983 and 1984, and by another 1 million units in 1985, to 15.4 million units (see Table 1). In the first quarter of 1986, new vehicle sales amounted to 14.8 million units on an annual

INDEX OF CONSUMER SENTIMENT

February 1966 = 100



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

TABLE 1. Vehicle and Home Sales (millions of units sold)

Year	Vehicles			Homes		
	Cars	Trucks	Total	New	Existing	Total
1971	10.2	1.8	12.0	0.7	2.0	2.7
1972	10.9	2.2	13.1	0.7	2.3	3.0
1973	11.4	2.7	14.1	0.6	2.4	3.0
1974	8.8	2.3	11.1	0.5	2.3	2.8
1975	8.5	2.2	10.7	0.5	2.5	3.0
1976	10.0	2.9	12.9	0.7	3.0	3.7
1977	11.1	3.3	14.4	0.8	3.7	4.5
1978	11.2	3.7	14.9	0.8	4.0	4.8
1979	10.6	3.1	13.7	0.7	3.8	4.5
1980	9.0	2.2	11.2	0.5	3.0	3.5
1981	8.5	2.1	10.6	0.5	2.4	2.9
1982	8.0	2.4	10.4	0.4	2.0	2.4
1983	9.2	2.9	12.1	0.6	2.7	3.3
1984	10.4	3.8	14.2	0.6	2.9	3.5
1985	11.0	4.4	15.4	0.7	3.2	3.9
1986:1*	10.7	4.1	14.8	0.8	3.3	4.1

*Entries are at annual rates.

basis, just below the 1985 fourth quarter rate of 14.9, but well below the extraordinary third quarter rate of 17.2 million units (when the availability of reduced interest rates greatly stimulated sales).

More vehicles were sold in 1985 than in any prior year. In total, 15.4 million cars and light trucks were sold, up from the 1978 cyclical peak of 14.9 million units, and the 1973 peak of 14.1 million. The overall increase reflected a small decline in sales of cars, offset by a larger increase in sales of light trucks. Cyclical peak years in car sales were in 1973 at 11.4, followed by 1978 at 11.2, and 1985 at 11.0. In contrast, light truck sales rose to an all-time high of 4.4 million units in 1985, up from the previous peaks of 3.7 in 1978 and 2.7 in 1973. Because a larger share of the trucks sold in 1985 were domestically produced, the import share for all vehicles was lower than for cars alone (23 versus 26 percent). Since the 1973 peak, the import share of all vehicle sales has risen from 14% to 23%, while truck sales as a proportion of all vehicle sales increased from 19% to 29%.

Although the cyclical peaks in annual sales rates have increased over time, the 1985 rate was only 1.3 million units above the 1973 level, despite the increase of 19 million households and 22 million employed persons over that same period. New vehicle sales as a proportion of the total number of households fell to 18% in 1985, from 20% in 1978, and 21% at the 1973 peak. As a proportion of all employed persons, new vehicle sales fell to 14% in 1985, from 15% in 1978 and 16% at the 1973 peak. Some of this decline can be attributed to the relatively higher growth rate in single adult households, and the relatively higher employment growth rates in the lower-paid service sectors. More importantly, vehicle prices have risen faster than family income over the past decade. The average price paid for a new car as a proportion of median family income was 44% in 1985, up from 36% in 1978, and 34% in 1973.

Homes. Favorable home buying attitudes were held by 76 percent of all families in the first quarter 1986 survey, the

highest quarterly average ever recorded in these surveys. Recent declines in mortgage interest rates have been largely responsible for improved home-buying conditions. In the first quarter 1986 survey, 63 percent of all families mentioned the availability of reduced mortgage rates, up from 41 percent at the start of 1985, and the highest proportion ever recorded. Complaints about high mortgage rates fell to 10 percent in the first quarter survey, the lowest level since the mid-1970s. As an indication of the extent of change during the past five years, 75 percent of all families complained about high interest rates in the first quarter of 1981, while just one percent mentioned the availability of low interest rates.

The lowest proportion of families since the mid-1960s complained about high home prices in the first quarter 1986 survey—just 9 percent. Favorable perceptions of home prices were held by 23 percent of all families in the first quarter survey, the highest level recorded in more than twenty years. In comparison, five years ago just 4 percent of all families favorably evaluated home prices, while 32 percent complained about high home prices.

Purchases of homes totaled 3.9 million units during 1985, more than 50% above the level recorded three years earlier (see again Table 1). Most of the improvement in home sales came in 1983, when sales of new and existing homes rose to 3.3 million units, from a recession low of 2.4 million in 1982. Although 1985 sales were the highest recorded since the last recession, they remain well below the peak of 4.8 million units sold in 1978. Nearly the entire shortfall from the 1978 peak was in sales of existing homes (3.2, down from 4.0), while sales of new homes in 1985 were just below the 1978 level (0.7, down from 0.8 million units). The 1978 peak in existing home sales was propelled by consumers' reactions to expected rapid increases in home prices. In contrast, the 1985 sales level has been built on favorable perceptions of current home prices. Very few consumers now report the advantages of buying-in-advance, since few consumers expect renewed rapid increases in home prices.

In the first quarter of 1986, sales of new and existing homes totaled 4.1 million units on an annual basis, continuing their slowly rising trend since the resurgence in 1983. These gains in home sales reflect consumers' responses to reductions in mortgage interest rates. Mortgage interest rates were slow to decline, and only recently fell below double digits. These declines in mortgage rates will continue to improve home sales during the year ahead.

Durables. Favorable attitudes toward buying conditions for large household durables were held by 77 percent of all families in the first quarter 1986 survey, the highest proportion recorded in 35 years. This new record level is only slightly higher than the prior peaks recorded in 1985 (74 percent) and 1984 (72 percent). This sustained period of favorable buying attitudes has been mainly due to favorable perceptions of market prices for household durables. In the first quarter 1986 survey, 39 percent referred to the availability of discounted prices for durables, just below the all-time record of 41 percent recorded in the first quarter of 1985, and the 40 percent recorded at the start of 1984. Fewer families complained about high prices on household durables than at any other time since the mid-1960s—just 7 percent in the first quarter 1986 survey.

Personal Finances Remain On Favorable Plateau

The financial situation of American families remained favorable in the most recent survey. Nearly the entire improvement from the recession lows was recorded from the first quarter of 1983 to the first quarter of 1984, when the proportion of families that reported improvement in their financial situation rose from 30 to 45 percent. That proportion has remained largely unchanged since the start of 1984. Among all families in the first quarter 1986 survey, 44 percent reported that their financial situation had improved during the prior year, between the 41 percent recorded at the start of 1985 and the cyclical peak of 45 percent recorded in 1984. Consumers' assessments of their own financial progress have not been as favorable for this long a period of time since the mid-1960s.

When asked to explain how their financial situation had changed during the past year, fewer consumers than at any time since the mid-1960s complained about the erosion of living standards due to inflation—11 percent in the first quarter 1986 survey. Income increases were reported by 35 percent of all families in the first quarter 1986 survey, just above the 33 percent recorded one year earlier, and equal to the figure recorded two years earlier. Declines in family incomes were reported by 16 percent of all families in the first quarter 1986 survey, unchanged from one and two years earlier.

Although the frequency of reported financial progress is below only that recorded in the mid-1960s, the situation then and now is not otherwise comparable. The all-time record proportion of families to report financial progress was 50 percent, recorded in the second quarter 1965 survey, 5 percentage points above the current cyclical peak. More importantly, at the 1965 peak just 12 percent of all families reported a worsening financial situation, about half the recent low of 23 percent. Reports of increases in family income reached

a high of 50 percent in 1965, compared with 36 percent in the current expansion.

When asked about prospects for their financial situation during the year ahead, consumers continued to hold a positive outlook in the most recent survey. In the first quarter of 1986, 36 percent of all families expected their financial situation to improve during the year ahead, between the 35 percent recorded one year and the cyclical peak of 41 percent recorded two years earlier. This small moderation in financial prospects can be traced to the expectation that income increases would be somewhat smaller during the year ahead. But because inflation expectations have declined by a comparable amount, real income expectations have been maintained at favorable levels. Just 12 percent of all families at the start of 1986 expected their financial situation to worsen during the balance of the year, the same as at the start of 1985.

Outlook for the Economy: Not Better, But Still Good

Improved economic conditions in the country as a whole were expected by 26 percent of all families in the first quarter 1986 survey, slightly above the 24 percent recorded in the fourth quarter of 1985, but just half the peak of 52 percent recorded nearly three years earlier. While the proportion of families that expected improvement has declined sharply, the proportion that expected the economy to worsen has remained low—15 percent in the first quarter of 1986, unchanged from one year earlier. The majority of consumers expected the performance of the economy during the year ahead to be neither better nor worse than at present. In the first quarter 1986 survey, 57 percent of all families expected overall economic conditions in 1986 to remain about the same as in 1985.

Despite the diminished outlook for growth, good times in the economy as a whole were nonetheless expected by the majority of consumers. Among all families in the first quarter 1986 survey, good times financially were expected by 59 percent, up from 53 percent one quarter earlier, but below the recent peak of 69 percent recorded two years earlier. The recent improvement was associated with expected declines in inflation and interest rates; the decline over the past two years has been mainly due to rising concerns with future job prospects.

At the start of 1986, half of all families expected the national unemployment rate to remain largely unchanged at its current level during the year ahead. For most of the past two years, this proportion has remained unchanged. On the margin, however, fewer families expected further declines in unemployment during 1986, while more families expected renewed increases. During the past two years, the proportion that expected declines in unemployment fell from 35 to 17 percent by the start of 1986, while the proportion that expected increases rose from 15 to 31 percent.

In contrast to the gradual worsening of unemployment expectations, inflation and interest rate expectations have become more favorable during the past two years. The annual rate of inflation was expected to average 3.7% at the start of 1986, down from 4.4% one year earlier, and the lowest level recorded in more than a decade. Interest rate declines were expected by 29 percent of all families in the 1986 survey,

up from 23 percent at year-end 1985, and the low of 9 percent in 1984. Increases in interest rates during the year ahead were expected by 32 percent of all families in the first quarter 1986 survey, down from 38 percent one quarter earlier, and the recent high of 65 percent recorded in 1984.

Summary Outlook

Consumer sentiment has now remained at very favorable levels for three years. For the past twelve consecutive quarters, the Index of Consumer Sentiment has been above 90, the highest sustained period of consumer confidence since the 1960s. Declines in inflation and interest rates have raised buying attitudes to record favorable levels. Though the expected size of nominal income increases has trended downward during the past few years, lower rates of inflation have also maintained consumers' evaluations of their own financial situation at favorable levels. Consumers expected the growth in

the domestic economy to remain slow during the year ahead, resulting in no further declines in the national unemployment rate. Although slow, the economic expansion was expected to continue, and this expectation supported the view that good times financially would continue in the country as a whole during the year ahead.

These results point toward diminished growth but still favorable levels of consumer sales in 1986. Real personal disposable income grew by only 1.6% in 1985 over year-earlier levels, substantially below the 5.7% growth recorded during 1984. Total real consumption expenditures, however, rose twice as fast as real personal disposable income—3.3% versus 1.6%. Due to the increased use of debt to finance this spending increase, the personal saving rate fell by nearly 2 percentage points—from 6.5% in 1984 to 4.6% in 1985. This was the lowest annual rate of savings recorded in more than thirty years. Rather than consumer willingness to spend, the constraint lies in the diminished ability of consumers to sustain spending increases above the growth rate of their personal income during the year ahead.

May 1986

Preferences for Work and Leisure*

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Introduction

It is a commonplace among economists and other observers of the social scene that people prefer leisure activities to work activities, and that an important part of the function of wage rates is to overcome the "distaste for work" that is thought of as a natural characteristic of mankind. That general notion is deeply ingrained in much social policy—the disincentive effects of welfare programs on willingness to work is often a topic of public concern, disability programs are often viewed skeptically because they provide an alternative to work for people who have marginal disabilities and who might be able to work, etc. And there is an extensive literature in economics, going back more than a century, which looks at the role of real wage rates in inducing people to supply labor to the market, and an almost equally extensive literature on the non-monetary characteristics of jobs which make them relatively attractive or unattractive and which therefore influence the wage rates needed to induce people to work.

The analysis of preferences for work and leisure, and the way in which work enters individual welfare (utility) functions, has been largely based on inferences from the relation between aggregate statistics on wage rates and on hours worked. The best evidence that people generally prefer leisure to work is probably the long-term decline in hours of work, and the offsetting long-term increase in hours of leisure, over the period of a century or more when wage rates rose very substantially in the industrialized West. That people will take some increased leisure as part of an increase in real income resulting from growth in real wage rates is not a disputable proposition. However, there are some interesting characteristics of the nature of preferences for work and leisure that have not been explored, and that have some intriguing implications for future developments in both the job market and the home.

Concepts

It is important to recognize that all activities carry two kinds of rewards. On the one hand, many activities result in an extrinsic product—working at a paid job produces income, and the income can be used to buy goods and services. Similarly, working within the home at cleaning, meal preparation, and child care also produces an extrinsic product—a clean house, a gourmet meal, or a certain quality of child. Some activities appear not to have extrinsic outcomes—watching television, for example, might appear to provide only rewards in the form of enjoyment of the activity, and not any extrinsic product. But even that is not entirely clear—watching television news, a documentary, or a movie may add to one's stock of information or insight about the world, and those can be thought of as extrinsic products.

Whether or not all activities are associated with extrinsic outcomes, it seems clear that all activities do contain a second type of reward—the intrinsic satisfaction obtained from doing the activity. In the case of work, some of the literature reads as if economists believe that people get negative intrinsic satisfaction from work, or at least negative satisfaction at the margin of the last hour or minute of work. But the simple proposition that people derive some level of satisfaction from each and every activity that they engage in seems logically indisputable, and the notion that these intrinsic satisfactions (let us call them process benefits) have some influence on the pattern of activities also seems compelling in principle.

Empirical Findings

Is there any direct evidence on the intrinsic satisfaction obtained from different activities, including work and leisure? Historically no, but during recent decades, yes. In conjunction with a 1975-76 study of time use among American households, we obtained measures of the intrinsic satisfactions associated with some 25 activities (child care, housework, job, television viewing, etc.). These same data were replicated in the early 1980s. In both studies, process benefits were obtained on a 10-point scale, ranging from 10 (enjoy doing the activity a great deal) to zero (dislike doing the activity a great deal). The scale has an implicit zero point (don't care about the activity one way or the other), labeled as five.

Some of the data obtained from the 1975-76 study are shown in Table 1. (The 1981-82 study has results that are virtually identical.) Activities are arrayed from the most satisfactory to the least satisfactory. Work is represented by a single variable—the intrinsic satisfactions obtained from one's job. Leisure is represented by a good many different variables—socializing, reading, playing sports, television viewing, etc. Housework activities, which might or might not be defined to include child care, also are represented by a number of different variables—cooking, shopping, cleaning, etc.

What is most striking about the results is the ranking of process benefits from work compared to process benefits from leisure. The conventional wisdom clearly suggests that the latter should outrank the former, certainly at the margin of choice and probably on average—after all, the prevailing theory is that people supply labor to the market in order to earn income so that leisure time can be enjoyed, and that a sufficiently high wage must be offered to overcome the disutility from work. But the data suggest just the reverse—that the intrinsic satisfaction from work, which represents an addition to the extrinsic reward in the form of income, is generally *higher* than the intrinsic satisfaction from leisure. Although some leisure activities outrank work in terms of process benefits, most do not, and the weighted average of process benefits from leisure would clearly rank well below process benefits from work.

*This paper is based on a paper with an identical title that appears as Chapter 13 in *Time, Goods, and Well-Being*, edited by F. Thomas Juster and Frank P. Stafford, Institute for Social Research, 1985.

TABLE 1. Mean Process Benefits and Time Use

Activity	N	Average Process Benefits	Average Hours Per Week*
Child care	429	8.76	2.89
Socializing	951	8.38	9.15
Job	612	7.95	25.79
Reading ¹	934	7.50	3.77
Sports ²	841	6.56	3.16
Spectator events ³	882	6.55	1.01
Crafts	898	6.53	1.67
Television	945	6.24	14.10
Cooking	930	6.16	6.36
Repairs	893	5.19	1.30
Organizations ⁴	808	4.83	2.96
Shopping ⁵	932	4.61	5.47
Cleaning	944	4.36	3.26

¹Time use includes all reading; process benefits are for reading books only.

²Time use includes indoor games as well as outdoor exercise. Process benefits apply only to active sports.

³Time use includes all spectator events. Process benefits are for movies and plays.

⁴Time use includes church attendance and all other organized activities other than work. Process benefits apply to "social organizations."

⁵Time use includes all shopping and market services. Process benefits are for grocery shopping only.

*N = 975 for all activities

Before discussing some possible implications of this result, it might be well to examine some of the structural characteristics of the process benefit data. For example, it would not be surprising if certain types of jobs had very high intrinsic satisfaction associated with them—challenging managerial jobs, professional jobs, etc. Moreover, it might be that the data on process benefits from work (which are self-report data) are contaminated by the fact that work carries a considerable extrinsic reward in the form of income. Respondents might be reporting high levels of intrinsic satisfaction with work, while actually meaning that they liked the product of the work activity (money income) rather than that they liked the activity itself.

Table 2 tells us something about the first of the questions—how do the process benefits from work compare for different types of jobs? The top panel contains data for men, the bottom panel has data for women, and the table divides the sample into a set of occupational categories ranging from professional and managerial to unskilled and service jobs. The results are quite interesting. There is hardly any evidence at all that process benefits from work are related to occupational category: For men, there is some slight indication that professional, managerial and sales jobs rank relatively high, while clerical, unskilled and service jobs rank a bit lower—as might be expected. But in all categories except unskilled labor, work continues to outrank most leisure activities. For women, there is absolutely no relation at all between process benefits from work and occupational class.

There is, however, an interesting relationship between work for pay and work in the home in these data. For both men

and women, work in the home (represented by cleaning the house) is clearly associated (negatively) with level of occupational skill—the higher the level of occupational skill, the less the reported satisfaction with housecleaning as an activity. Thus the *differential* between process benefits from work for pay and from work in the home is greater for people in highly skilled and professional jobs than for those in unskilled or service jobs. But the rank order is unaffected—work still greatly outranks housework, and generally outranks leisure activity—although as noted the unskilled category for males had work ranking about the same as the overall average for leisure.

On the second issue—are the data contaminated by respondents mixing together the intrinsic and extrinsic rewards from work?—we have some indirect evidence. In another part of the study, we asked respondents about the particular characteristics of their work situation that accounted for the assessment of process benefits that they had just given. We then analyzed the resulting job characteristics, to see whether the factors reported as being associated with high (or low) levels of process benefits could have reflected the financial reward from work. The answer is unambiguously in the negative: people who reported that the kind of people they worked with, the amount of learning opportunity, the supervisory relationships, the boring or repetitious nature of the job, etc., were the important factors in their assessment did report significantly higher (or lower) levels of process benefits from work than others; people who reported that characteristics like pay and benefits were responsible for their assessment reported just about the same process benefit scores as others.

Interestingly enough, when the same test was applied to housework, there was clear evidence that respondents were mixing together the extrinsic products of housework (a clean house) with the intrinsic satisfaction from doing housework: people who reported relatively high scores on satisfaction from doing housework were quite likely to say that the reason for their response had to do with the fact that they liked having a clean house—clearly an extrinsic product and not an intrinsic reward. Thus the (low) process benefit scores for housework would be even lower if we eliminated households who were mixing intrinsic and extrinsic rewards in their responses.

What characteristics of activities seem to account for these results? One relationship that clearly emerges from scanning the data in Table 1 is that the amount of personal interaction involved in an activity appears to be strongly associated with process benefits—the more interactive the activity, the higher the process benefit score. Thus child care, which leads the activity list, is necessarily interactive, while cleaning house, which is the lowest ranked activity, is quite apt to be a solitary activity that does not involve interaction with others. Generally speaking, the more interactive activities tend to dominate the top half of the rankings, while the less interactive ones are to be found in the bottom half of the rankings.

Implications

That result, and the finding that work ranks high on process benefit relative to leisure, has some interesting implications. In particular, these results may well have an influence on the way in which technology impacts on American society, and on the growth of the labor force participation rate among women in the U.S.

TABLE 2. Process Benefit Mean Values, Selected Activities,
1975-76 Data, Within Occupational Groups

Activity	Professional- Managerial, Self-employed	Clerical	Sales	Craftsmen, Foremen, Operatives	Unskilled Services
	A. Men				
	N = 239	N = 33	N = 37	N = 252	N = 43
Enjoy...					
Cleaning house	2.77	3.35	2.36	3.33	3.56
Your job	8.36	7.52	8.47	7.96	7.30
Talking with friends	8.04	7.77	8.12	8.33	8.40
Home entertainment	7.64	6.94	7.62	7.30	7.72
Watching TV	5.95	6.00	6.06	6.22	6.72
Playing sports	7.28	7.35	7.53	7.36	7.43
Movies and plays	6.87	7.16	7.28	6.66	7.15
	B. Women				
	N = 119	N = 155	N = 31	N = 59	N = 81
Enjoy...					
Cleaning house	3.89	5.03	4.62	5.10	5.42
Your job	8.11	7.47	8.52	7.80	8.28
Talking with friends	8.34	8.34	8.46	8.16	8.31
Home entertainment	8.16	7.55	7.96	7.72	7.11
Watching TV	5.57	5.81	5.71	6.47	6.05
Playing sports	6.66	6.90	6.33	6.87	5.66
Movies and plays	7.65	7.35	6.76	6.52	6.11

Technology is generally thought of as a way of improving economic efficiency. Thus, the automated teller machine, automated shopping, electronic communication devices, and the dispersal of work activities from the office to the home are often thought of as representing significant gains in efficiency achieved through technology. That such changes represent efficiency gains may well be true. But at least some of them appear to run directly into a potential obstacle represented by consumer preferences.

A characteristic of these automated processes is that they are not as interactive as the activities that they displace. In some cases, the efficiency gain may be substantial and the interpersonal relationship not very important, as, for example, automatic teller machines. But in other cases, the efficiency gain may be relatively modest and the loss of interpersonal communication may be substantial, as, for example, dispersal of work to the home by way of computing technology. If the results above are to be believed, it seems entirely possible that the replacement of interpersonal communication processes with electronic ones may be more limited than pure efficiency considerations would suggest.

The data suggest that people have strong preferences for work as an activity *per se*, quite independent of the income produced by it. Over the last decade or so, analysts have been continually surprised by the extent of growth in labor force participation rates for women, and models that use wage rate and income variables to explain that growth have often underestimated it. A possible interpretation is that part of

what is driving labor force participation growth rates among women is simply the intrinsic satisfaction obtained from having part of one's activities involving a work environment rather than a home environment.

There are no data from which change over time in the intrinsic satisfactions from work can be assessed, but the fact that preference patterns have the shape they do suggests that there may well be a latent demand for market work on the part of many, especially women. The data, overall, do not suggest that people have strong preferences for a mix of activities that involve a *full-time* job in the market. But they are consistent with the notion that an element of work is a desirable feature of an activity package, and for many people the preferred mixture of activities may well include part-time employment.

One characteristic of employment markets in the U.S. generally is that, with some exceptions, employment opportunities are quite apt to be dominated by the supply of full-time jobs. Many employers are not well organized to make effective use of part-timers, and there are economic costs to part-time employment that make it less efficient from the point of view of employers. The preference data suggest that there may be a substantial demand for the right configuration of part-time employment, certainly among women, and possibly among others as well. Employers able to configure work activities so as to capitalize on that demand might well be able to exploit an opportunity for profit.

EDITOR'S NOTE

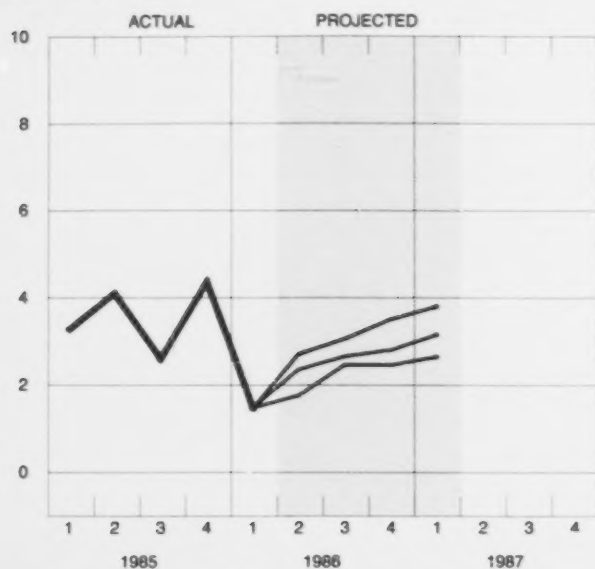
Regular readers are undoubtedly aware that we have been unable to meet our publication schedule during the past several months. Our issue dated Fourth Quarter 1985 was published in February of this year, and this "First Quarter 1986" issue is being released in early June.

Such publication delays have been due, primarily, to difficulties in attracting articles of suitable quality for publication. We are actively working to overcome this problem by broadening our contributor base; specifically, we are currently obtaining commitments from the large community of social scientists at The University of Michigan—both inside and outside of the Institute for Social Research, from which we publish. We also expect to obtain a better mix of economic forecasting articles—an area where we have been deficient recently—by attracting contributions from writers with viewpoints ranging over the rather wide spectrum of thought and opinion existing among economists.

We expect to resume our normal publication schedule shortly. Of course we very much appreciate your understanding and continued support for ECONOMIC OUTLOOK USA.

CONSUMER PRICE INDEX

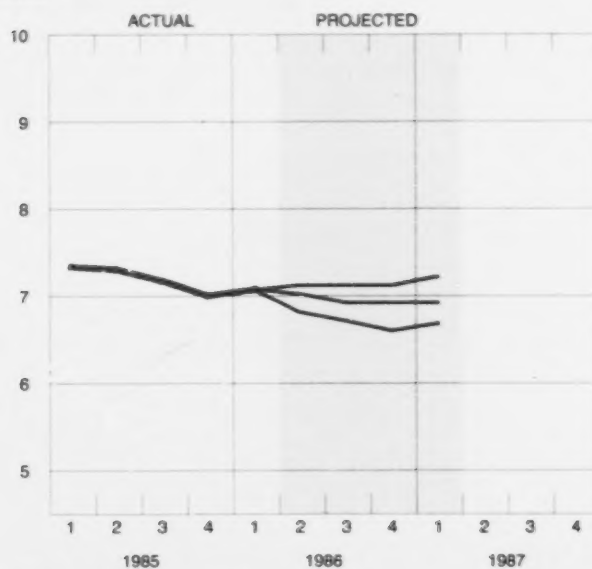
Percent Change
at Annual Rate



Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

UNEMPLOYMENT RATE

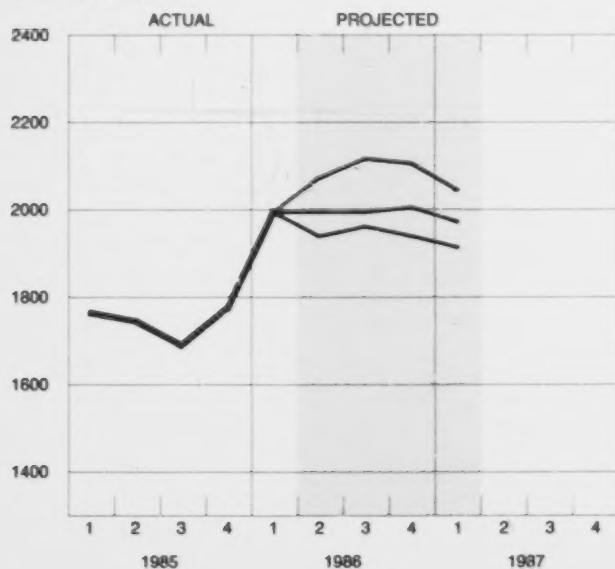
Percent



Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

NEW PRIVATE HOUSING UNITS STARTED

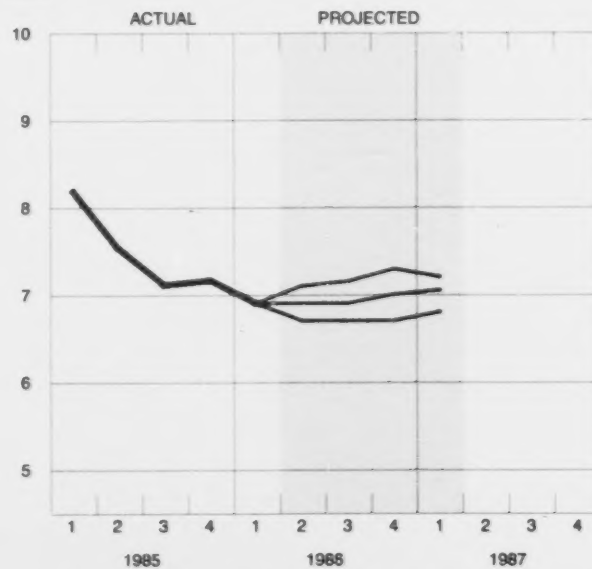
Thousands of Units



Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

3-MONTH TREASURY BILL RATE

Percent



Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

Actual and Projected Economic Indicators

seasonally adjusted

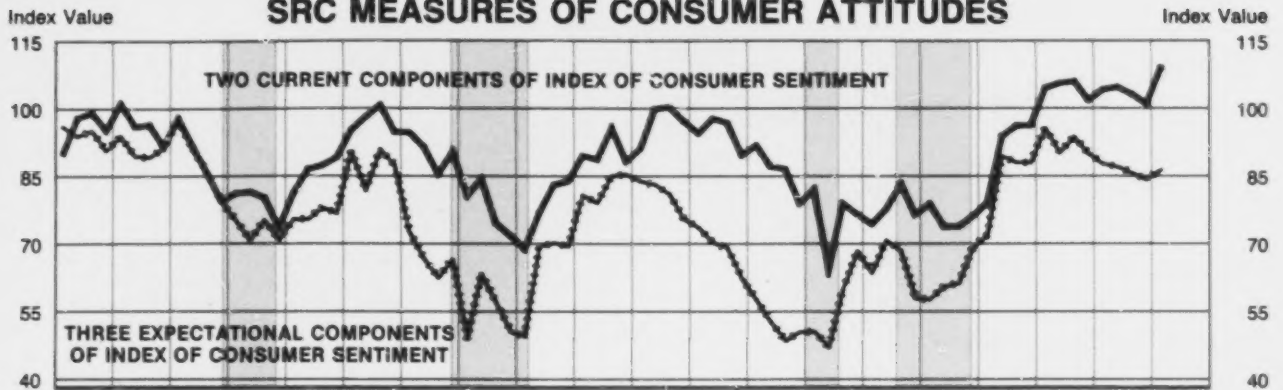
SERIES FORECAST BY THE ASA-NBER PANEL																
ECONOMIC INDICATOR	Quarterly Data													Annual Data		
	Actual							Projected						Actual		Proj.
	84:3	84:4	85:1	85:2	85:3	85:4	86:1	86:1	86:2	86:3	86:4	87:1	1984	1985	1986	
GROSS NATIONAL PRODUCT*	3,812	3,853	3,918	3,961	4,017	4,059	4,121	4,138	4,204	4,280	4,352	4,418	3,775	3,989	4,240	
GNP IMPLICIT PRICE DEFLATOR* (index, 1982 = 100)	108.6	109.6	110.4	111.3	112.1	113.0	113.7	114.0	114.7	115.8	117.0	117.8	108.1	111.7	115.2	
CORPORATE PROFITS AFTER TAXES*	140.3	140.6	136.6	136.4	141.1	146.7	139.5	145.0	148.0	150.5	152.5	151.0	144.0	140.2	149.5	
UNEMPLOYMENT RATE (percent)	7.43	7.23	7.33	7.30	7.17	7.00	7.07	6.85	6.80	6.70	6.70	6.70	7.51	7.20	6.80	
INDUSTRIAL PRODUCTION (index, 1977 = 100)	123.3	123.1	123.8	124.2	124.8	125.4	125.8	127.0	128.0	129.7	131.0	131.5	121.8	124.5	129.0	
NEW PRIVATE HOUSING UNITS STARTED (millions)*	1.675	1.613	1.762	1.743	1.688	1.773	1.988	1.800	1.800	1.800	1.810	1.780	1.763	1.741	1.820	
CONSUMER PRICE INDEX (annualized percent change from prior quarter or year)*	3.84	3.68	3.21	4.05	2.56	4.32	1.44	3.20	3.20	3.50	3.65	4.00	4.26	3.54	3.30	
3-MONTH TREASURY BILL RATE (percent)	10.34	8.97	8.18	7.52	7.10	7.15	6.89	7.00	7.00	7.00	7.10	7.15	9.57	7.49	7.00	
NEW HIGH-GRADE CORPORATE BOND YIELD (percent)	13.72	12.63	12.57	11.88	11.52	11.04	10.03	10.20	10.00	10.10	10.25	10.20	13.37	11.75	10.10	
GNP IN 1982 DOLLARS*	3,510	3,516	3,548	3,557	3,584	3,591	3,624	3,630	3,657	3,693	3,718	3,731	3,492	3,570	3,679	
PERSONAL CONSUMPTION EXPENDITURES (1982 dollars)*	2,243	2,262	2,289	2,303	2,330	2,330	2,354	2,352	2,367	2,381	2,394	2,409	2,240	2,313	2,374	
NONRESIDENTIAL FIXED INVESTMENT (1982 dollars)*	437.6	457.8	457.2	470.9	473.7	486.5	469.8	486.0	489.0	491.0	495.0	494.1	430.2	472.1	489.0	
RESIDENTIAL FIXED INVESTMENT (1982 dollars)*	170.8	166.0	166.7	169.6	173.1	175.5	177.8	178.5	181.0	184.0	184.5	185.0	168.3	171.2	182.0	
CHANGE IN BUSINESS INVENTORIES (1982 dollars)*	64.9	36.1	15.8	15.1	-1.8	-6.3	33.0	10.0	14.0	16.0	19.0	20.0	62.6	5.7	17.9	
NET EXPORTS (1982 dollars)*	-88.7	-100	-71.8	-101	-120	-141	-130	-125	-119	-110	-102	-99.0	-85.0	-108	-110	
FEDERAL GOVERNMENT PURCHASES (1982 dollars)*	296.7	307.3	304.3	305.9	331.1	349.0	319.7	340.0	341.0	337.0	338.0	336.0	292.5	322.6	337.5	
STATE AND LOCAL GOVERNMENT PURCHASES (1982 dollars)*	385.7	386.6	387.1	393.6	398.1	396.5	399.1	400.1	402.1	404.1	407.3	409.0	383.3	393.8	403.5	
SERIES FROM THE CURRENT-DOLLAR GNP ACCOUNTS																
ECONOMIC INDICATOR	Quarterly Data												Annual Data			
	83:2	83:3	83:4	84:1	84:2	84:3	84:4	85:1	85:2	85:3	85:4	86:1	1983	1984	1985	
GROSS NATIONAL PRODUCT*	3,365	3,438	3,535	3,677	3,758	3,812	3,853	3,918	3,961	4,017	4,059	4,121	3,402	3,775	3,989	
PERSONAL CONSUMPTION EXPENDITURES*	2,210	2,255	2,306	2,359	2,414	2,439	2,480	2,525	2,563	2,606	2,635	2,669	2,229	2,423	2,582	
GROSS PRIVATE DOMESTIC INVESTMENT*	483.7	521.2	577.6	658.8	673.3	687.9	676.2	657.6	672.8	666.1	680.7	715.4	501.9	674.0	669.3	
NET EXPORTS*	-2.6	-19.7	-27.4	-37.4	-65.3	-61.9	-72.2	-42.3	-70.3	-87.8	-113	-99.8	-5.3	-59.2	-78.5	
GOVERNMENT PURCHASES*	673.8	681.1	678.6	696.5	735.1	747.3	768.4	777.2	794.8	832.5	857.2	836.6	675.7	736.8	815.4	
DISPOSABLE PERSONAL INCOME*	2,388	2,448	2,520	2,610	2,650	2,697	2,724	2,739	2,818	2,800	2,846	2,895	2,425	2,670	2,801	
PERSONAL SAVING RATE* (percent of disposable income)	4.9	5.3	5.8	7.0	6.1	6.7	6.0	4.8	5.9	3.7	4.0	4.4	5.5	6.4	4.6	

Note: (1) All data are at annual rates and in billions of current dollars unless otherwise indicated. (2) To facilitate comparison and evaluation of forecasts, both actual data, released in late May, and projected data, released by ASA-NBER in March, are displayed for first quarter 1986.

Sources: Projections: American Statistical Association—National Bureau of Economic Research panel of forecasters.
Actual Data: U.S. Departments of Commerce and Labor, Board of Governors of the Federal Reserve System.

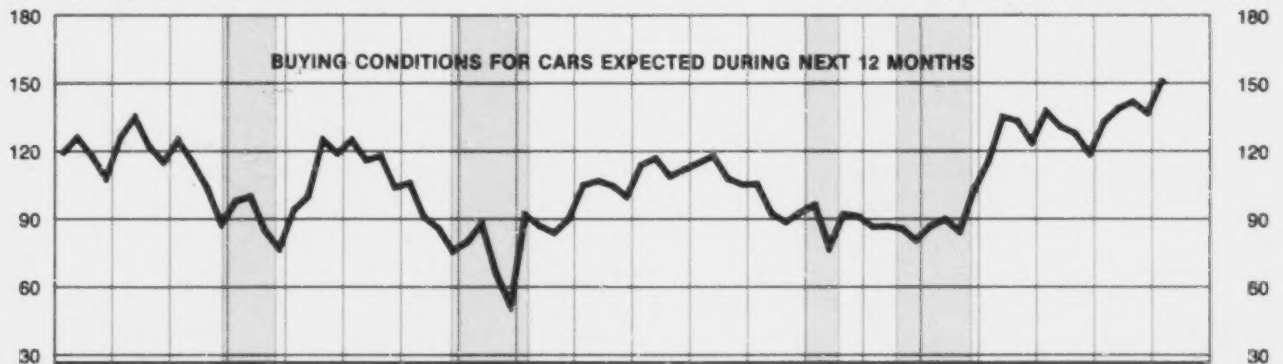
*Substantial revision of the data for variables marked with an asterisk has occurred since the last printing.

SRC MEASURES OF CONSUMER ATTITUDES



Percent "Good" Minus Percent "Bad" Plus 100

Percent "Good" Minus Percent "Bad" Plus 100



Percent "Good" Minus Percent "Bad" Plus 100

Percent "Good" Minus Percent "Bad" Plus 100



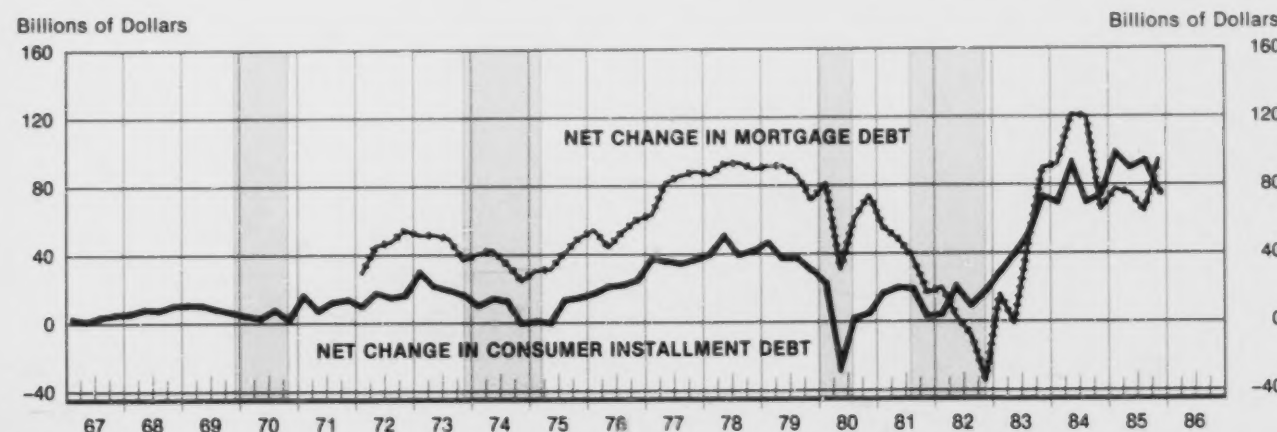
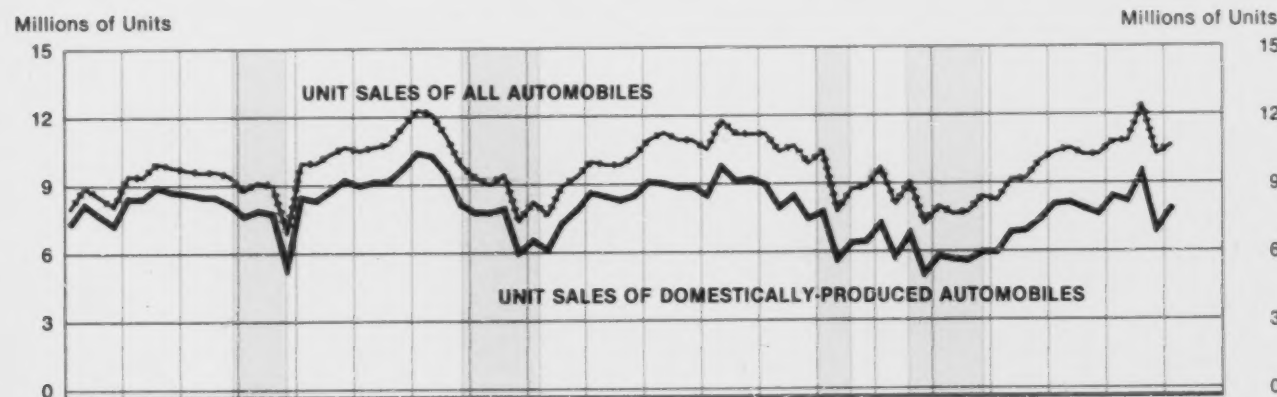
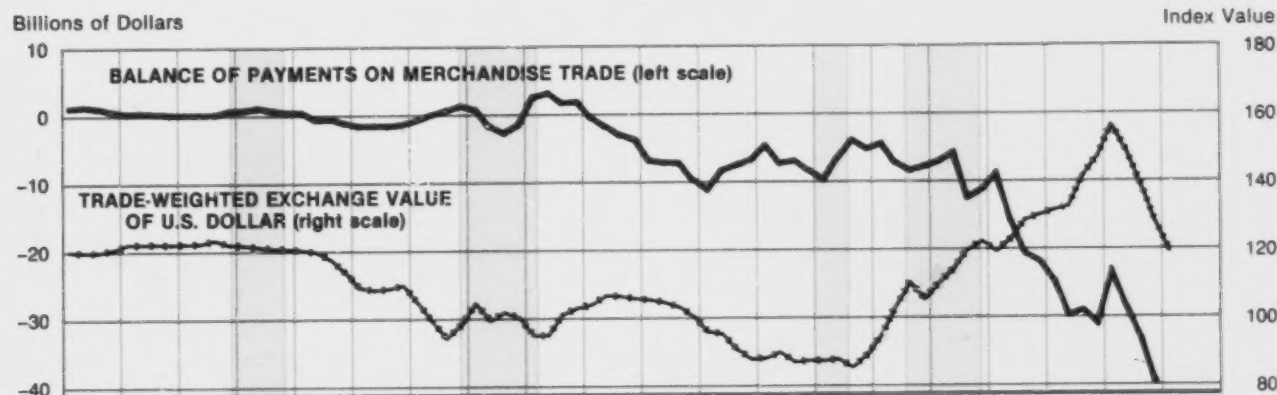
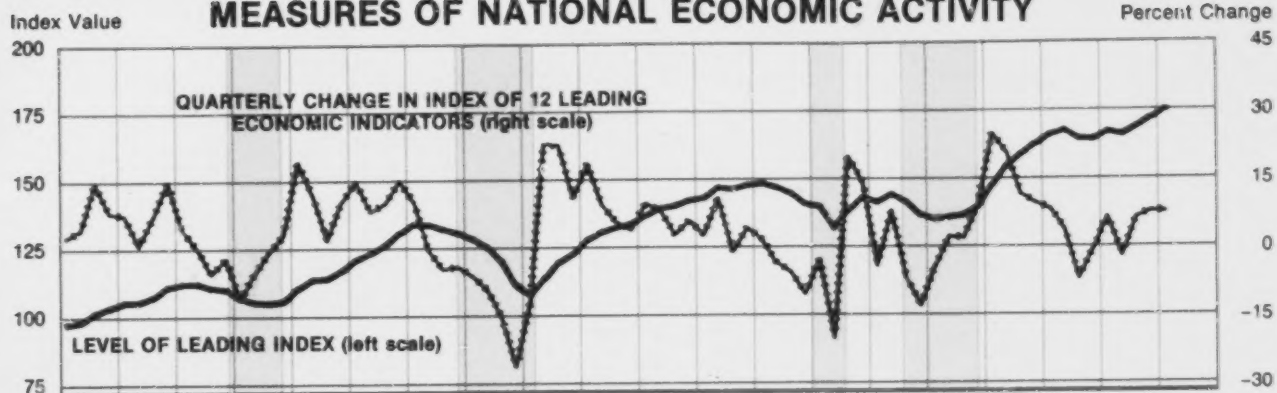
Percent Change

Percent Change



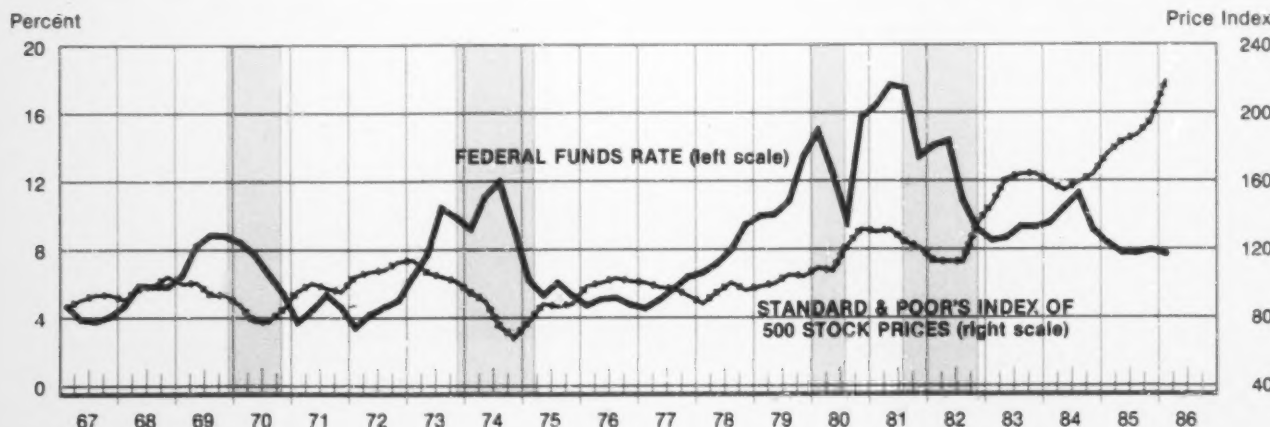
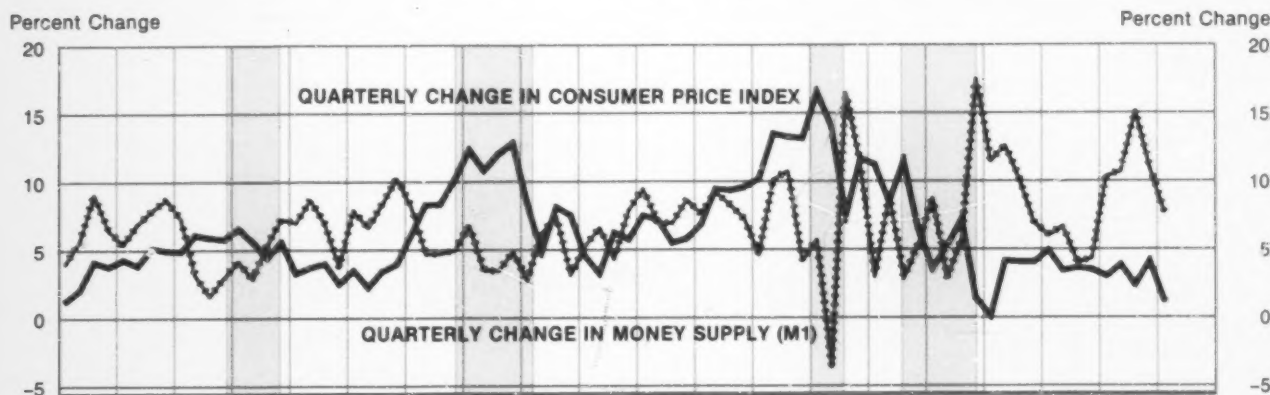
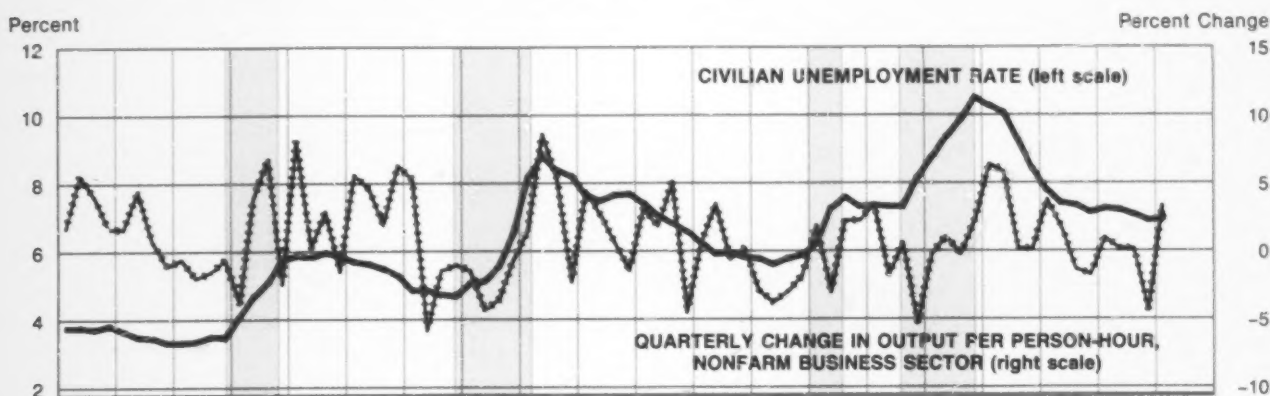
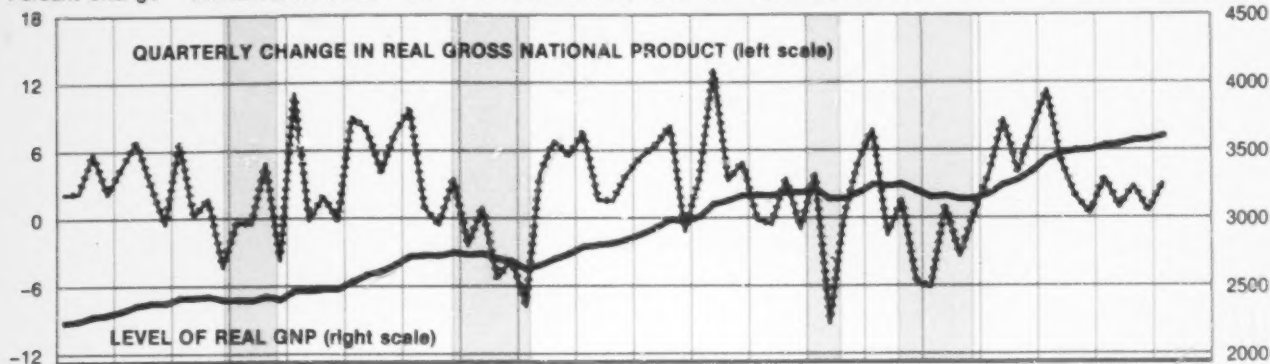
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This new collection of 20 essays explores a shared set of time use data bases spanning two decades and provides a comprehensive overview of developments in the study of time use.

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Good News and Bad News

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Buying Attitudes Set New Records—
Yet Again

William H. Frey

Lifecourse Migration and Redistribution
of the Elderly across U.S. Regions and
Metropolitan Areas

Reynolds Farley

Assessing Black Progress:
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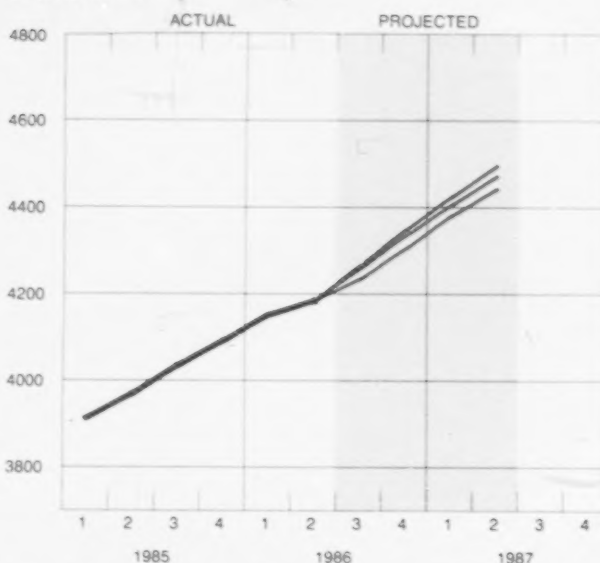
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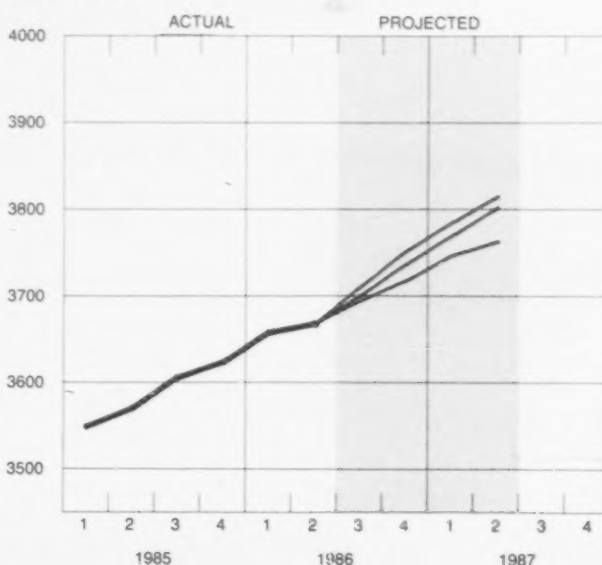
IN CURRENT DOLLARS
Billions of Dollars



Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

GROSS NATIONAL PRODUCT

IN CONSTANT 1982 DOLLARS
Billions of Dollars



Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

Tax Reform and the American Economy: Good News and Bad News

Murray L. Weidenbaum*

Mallinckrodt Distinguished University Professor and
Director of the Center for the Study of American Business
Washington University in St. Louis

The tax reform bill that is speeding through the Congress will generate the most sweeping changes in the Internal Revenue Code since World War II. The economic impacts—good and bad—will work their way through the economic system over a long period of time.

The obvious effects will be unfolding in 1987, at least according to the current timetable. On the basis of the expected outcome of the House-Senate Conference Committee deliberations, most individual and family taxpayers will enjoy a reduction in income tax rates beginning July 1, 1987. So will many companies who do not make extensive use of the incentive provisions now in the tax law.

In contrast, people who have been depending on large amounts of tax shelters in ordering their financial affairs will wind up paying more federal income taxes, as will the companies who now make widespread use of the numerous special provisions in the Internal Revenue Code. Many of these benefits are scheduled to be eliminated on January 1, 1987. The intent of these revisions in the tax system is to create a more level playing field for business executives, employees, and consumers. Table 1 shows how the House and Senate versions differ from the current tax system. Although public support for the provisions of the Senate bill seems to be much greater, it can be seen that they both are variations on the same theme: reduce income tax rates by broadening the tax base.

Macroeconomic Effects

From the viewpoint of the national economy, the fundamental impacts will be less visible but no less important. Given the enthusiastic response to Senator Robert Packwood's version of tax reform (which passed the Senate almost unanimously), it may come as a surprise to some to learn that the overall economic effects are likely to be negative, at least for the rest of the decade of the 1980s.

The substantial reduction in personal taxes, taken by itself, will raise disposable personal income and thus encourage additional consumer spending. However, the elimination of the investment tax credit and other actions that increase the tax burden on business are likely to dampen the investment in new factories and production equipment so essential to future economic growth. On the basis of computer simulations using the Washington University macroeconomic model, it appears that total business capital spending would be shaved by about 5 percent in the calendar year 1987. By 1991, the amount of such investment is expected to be about 12 percent lower than it would be if the present tax law were to remain in force (see Table 2 for details).

These relatively pessimistic conclusions vary substantially from the more upbeat White House assessment that tax

reform will promote more rapid expansion. The latter projection counts heavily on gains in output that will arise if the allocation of resources is guided more by economic fundamentals than by the tax code. Also, according to this view, the sharp decline in marginal personal tax rates is expected to unleash a surge of productive effort, including an increase in labor force participation and intensity of work effort. It should be recalled, however, that the 1981 tax cuts yielded rather modest results.

Unless changed by the Conference Committee, the "loophole" closings would take effect six months or more before the rate reductions. This would result in a substantial—and potentially destabilizing—swing in federal revenues: a \$22 billion tax increase in fiscal 1987, followed by a \$20 billion tax cut in fiscal 1988.

On balance, it is likely that the gross national product in real terms (after boiling out the effects of inflation) will be about 2 percent lower than it otherwise would be for the rest of this decade—and unemployment about 1 million higher. That is not necessarily the same as forecasting recession, but the pace of the economy will be less buoyant.

That would occur at the same time that the Congress will be under the gun to cut federal spending in order to attain the Gramm-Rudman-Hollings target of a balanced budget by 1991. The challenge to the Fed to offset simultaneously the sharp rise in federal revenues and the cuts in federal spending would be substantial. Given the limitations of monetary policy, the likelihood of a moderate recession occurring in the next several years would be raised a notch or two.

Microeconomic Effects

Enactment of a major tax reform bill is likely to yield dramatic changes in specific sectors of the American economy. Many of the impending changes in the Internal Revenue Code will result in investments in financial assets being devoted to support more economically productive activities than is often the case today. In the long run, those changes would also lead to a more efficient economy. With lower rates, people will be less likely to incur expenses merely because they are tax deductible. No longer will they seek out "deep shelter" investments that yield no economic return but are only attractive because of their tax advantages.

For example, under the Senate bill, the use of tax shelters would be restricted drastically—by precluding losses on passive investments as offsets to taxable income from other sources. If the taxpayer materially participates in the management of rental property, up to \$25,000 of losses could be used to offset other income. Otherwise, the \$25,000 allowance is only available in the case of low-income housing. In a provision hard to square with the notion of tax simplification, the \$25,000 of allowable losses on these categories of investment in rental property would be phased out over the adjusted gross income range of \$100,000 to \$150,000.

*Prof. Weidenbaum served as chairman of the Council of Economic Advisers in 1981-82.

TABLE 1. Variations on Federal Tax Reform

Component	Current Law	House Bill	Senate Bill
Individual Tax Rates	14 rates: 11% to 50%	4 rates: 15, 25, 35, 38%	2 rates: 15, 27%
Personal Exemption	\$1,080	\$1,500 for itemizers; \$2,000 for non-itemizers	\$2,000, phased out for incomes above \$145,320
Mortgage Interest	Fully deductible	Principal and second residence deductible	Principal and second residence deductible
Other Interest Deductions	\$10,000 plus amount equal to investment income	\$20,000 plus amount equal to investment income	Limited to amount equal to investment income
Charitable Contributions	Fully deductible	Deductible for itemizers; limited for non-itemizers	Deductible only for itemizers
State and Local Taxes	Fully deductible	Fully deductible	Deductible except sales tax
Long-term Capital Gains	20% top rate	22% top rate	27% top rate
Short-term Capital Gains	50% top rate	38% top rate	27% top rate
Individual Retirement Accounts	\$2,000; \$250 for non-working spouse	\$2,000, except for taxpayers with 401(K)s; \$250 for non-working spouse	Eliminates deduction for contributions, except for workers with no pension plan
Corporate Tax Rate	46% top rate	36% top rate	33% top rate
Investment Tax Credit	6% to 10%	Repealed	Repealed
Depreciation	Accelerated	Slower depreciation	Accelerated; more generous for equipment, less generous for real estate than current law

Curtailing tax shelters, however, is also likely to discourage the building of rental property, ranging from office buildings to multi-family housing units. Thus, people who rent their offices or apartments are likely to pay higher rents, at least until the forces of demand and supply reach a new balance. Some areas of the country, however, would welcome the evaporation of the current surpluses of rental housing and office space.

The prices of luxury homes might well soften because homeowners in the top marginal tax brackets would find the after-tax cost of home mortgages and property taxes rising substantially.

Not all of the revisions in the tax code are likely to wind up promoting economic efficiency. We need to keep in mind the role of the joint House-Senate Conference Committee, which is charged with developing a compromise between the two different versions of tax reform. The House may well insist that the Senate move back to some of the House-proposed changes, especially those that would discourage business investment. Overall, the "revenue neutral" House bill would increase business taxes by about \$180 billion over the next five years, while the Senate bill would raise the amount by \$93 billion. In both, the tax burden on private individuals would decline by approximately an equal amount. (Table 3

shows the average reduction in taxes for individuals in various income classes, under the Senate bill.) Because consumers save less than business, such a shift is likely to reduce the private sector saving rate and put upward pressure on interest rates.

Because of the inevitable political compromises embodied in the reform proposals, there undoubtedly will be opportunities for new loopholes to be created. A potential example involves personal interest expense. Except for home mortgages, interest on consumer credit will no longer be treated as a tax deductible item, at least under the Senate bill. Already, some financial institutions are gearing up to help consumers tap the equity in their homes for collateral on new extensions of credit—which can be used for whatever purpose the borrower desires. Second mortgages would become more popular as people finance their purchases of cars, furniture, and major appliances less through traditional installment debt and more through "home equity" lending.

Similarly, in an effort to reduce the tax advantages of the proverbial three-martini lunch, the Congress is expected to limit the tax deductibility of all business meals to 80 percent of the cost. Hence, the on-the-road salesman who eats his modest grits-and-coffee breakfast alone will be hit as hard as those who take their clients to plush nightclubs. It would

TABLE 2. Estimated Effects of the Senate Tax Reform Bill

Economic Indicator	1987	1988	1989	1990	1991
GNP (bil \$1982)					
Current law	3790.9	3918.5	4055.5	4189.2	4320.8
Senate bill	3746.0	3866.0	3993.7	4118.6	4244.5
% difference	-1.2	-1.3	-1.5	-1.7	-1.8
Unemployment Rate (%)					
Current law	6.7	6.7	6.5	6.5	6.6
Senate bill	7.1	7.5	7.6	7.9	8.2
Difference	0.4	0.8	1.1	1.4	1.6
AAA Corporate Bond Rate (%)					
Current law	8.5	7.8	7.4	7.3	7.4
Senate bill	8.4	7.5	7.0	6.6	6.6
Difference	-0.1	-0.3	-0.4	-0.7	-0.8
Consumer Spending (bil \$1982)					
Current law	2428.1	2475.2	2525.1	2585.0	2654.3
Senate bill	2407.4	2462.4	2508.3	2559.2	2617.3
% difference	-0.9	-0.5	-0.7	-1.0	-1.4
Nonresidential Fixed Investment (bil \$1982)					
Current law	525.1	551.5	579.3	600.9	619.1
Senate bill	499.4	507.0	520.2	531.9	545.0
% difference	-4.9	-8.1	-10.2	-11.5	-12.0
Single Family Housing Starts (thousands)					
Current law	1234.8	1214.1	1226.4	1235.9	1214.3
Senate bill	1199.1	1191.2	1216.9	1231.4	1214.6
% difference	-2.9	-1.9	-0.8	-0.4	0.0
Multi-Family Housing Starts (thousands)					
Current law	693.5	658.3	655.2	661.5	650.3
Senate bill	565.9	568.1	600.4	625.8	623.8
% difference	-18.4	-13.7	-8.4	-5.4	-4.1
Equipment (bil \$1982)					
Current law	1709.3	1810.4	1917.0	2025.8	2135.7
Senate bill	1694.5	1768.7	1840.9	1912.2	1985.9
% difference	-0.9	-2.3	-4.0	-5.6	-7.0
Nonresidential Structures (bil \$1982)					
Current law	1963.8	2031.8	2103.2	2176.4	2247.3
Senate bill	1960.5	2021.4	2082.1	2142.0	2197.8
% difference	-0.2	-0.5	-1.0	-1.6	-2.2

Note: Estimated effects are shown prior to responses that would result from accommodative monetary policy.

Source: Washington University, Center for the Study of American Business.

TABLE 3. Impact of the Senate Tax Bill on Individual Tax Liabilities, by Income Class

Personal Income Class (1986 dollars)	Average Reduction in 1988 Income Tax Liability
Below \$10,000	62.2%
\$10,000-\$19,999	18.0
\$20,000-\$29,999	8.0
\$30,000-\$39,999	5.0
\$40,000-\$49,999	6.5
\$50,000-\$74,999	3.7
\$75,000-\$99,999	3.2
\$100,000-\$199,999	3.6
\$200,000 and above	4.7

Source: Joint Committee on Taxation.

not be surprising to see many hotels shift away from the European plan (where meals are billed separately and thus subject to the 80 percent limitation) toward various modifications of the American plan—where food is included in the basic room charge.

Clearly, tax reform will not mean the end of "cottage industries" specializing in the creation of tax breaks. It will mean many shifts in business activity in order to adjust to the new tax regime. Nevertheless, the tax return facing the individual citizen, after the inevitable transition period, is likely to be simpler than it now is. That may be bad news for the numerous tax preparation firms, but it should be welcome to the average taxpayer.

Other changes in the tax code would influence the pattern of personal investments. For example, eliminating the lower tax rate for capital gains—and cutting the top tax bracket

from 50 percent to 27 percent — will make taxable bonds more attractive and also make bonds in general more competitive with stocks. Offsetting that, corporate debt financing will become relatively less attractive as the advantage of tax deductibility for interest is reduced by lower corporate income tax rates.

Municipal bonds will remain attractive to individual investors because they would be one of the few shelters that would remain. Some investment bankers believe that the longer-run consequence of a higher maximum rate on long-term capital gains and a lower top rate on short-term gains could be greater frequency and hence higher volumes of buying and selling of shares of stock.

The actual passage of the tax reform bill may lead to a temporary burst of financial transactions. For example, many long-term holders of appreciated assets will find it advantageous to sell before the end of the current tax year — and to pay taxes at the now-lower capital gains rate. On the other side of the market, the volume of tax-exempt securities being issued is likely to spurt, with the reduction of legal uncertainties about which types of municipal issues will continue to qualify for federal tax exemption.

Also, the after-tax cost of borrowing would be higher both because consumer interest no longer would be deductible and because many individuals and businesses will face lower marginal tax rates. To that extent, saving would become more attractive and spending on credit less so, thus providing some downward pressure on interest rates. By taxing ordinary income and capital gains at the same rate, the Senate version of tax reform also increases the incentive for corporations to pay out dividends rather than to retain cash in an attempt to compensate shareholders with capital gains.

One area, among many, of the future shifts is in the amount and pattern of charitable contributions. On the one hand, lower tax rates mean larger amounts of after-tax income available for making donations to worthy causes. However, those lower rates also mean that the after-tax cost of a given charitable contribution will be larger.

For example, a taxpayer now in the 50 percent bracket finds that the effective cost of a \$1 donation is 50 cents. But a shift, as envisioned in the Senate bill, to a top bracket of 27 percent means that the after-tax cost will rise to 73 cents. There is no certain way of gauging in advance the extent to which these two opposite influences (the very different price and income effects) will offset each other. These are just a few examples of the point being made here: basic changes in the way that the American economy works will result from changing the role that tax factors play in economic decision-making.

Conclusions

What is clear is that, in the short run at least, we will pay an economic penalty as the economy adjusts to this change in revenue structure away from individual taxes and toward business taxes. But, in the long run, we may witness the creation of a new business climate that is conducive to greater efficiency, productivity, and competitiveness. The exact nature of the trade-off will depend on the way in which millions of consumers and investors and many thousands of business firms and farmers respond to this key shift in the economic groundrules.

In any event, the euphoria generated in many circles by the advent of tax reform is premature. In Washington parlance, the tax reform train is leaving the station and

everyone is rushing to get aboard. That means that the support for the tax bill, especially the Senate version, has become so overwhelming that opposition has virtually disappeared.

But the tax reform bill promises to have many negative effects as well as positive effects. Just like the other tax laws that have passed since the 1981 tax cut, taxpayers will have to learn to adapt to many new and some unpleasant provisions. Politicians may say that the monolithic bogeyman called "business" will take all the hard knocks, but the business system acts as a "niddle man," passing on added costs (tax and otherwise) to the consumer in the form of higher prices, to employees in the form of reduced wages and fringes, and to shareholders in the form of lower returns to capital. Thus, tax reform should be received with almost as much trepidation as exultation.

July 1986

RSQE Mid-Year Update

The following projections are from the mid-year review and forecast prepared by Saul H. Hymans, Joan P. Cray, and Janet C. Wolfe of the University of Michigan's Research Seminar in Quantitative Economics (RSQE). This latest update of "The Michigan Model" was released in mid-August.

Summary Projections of Selected Economic Indicators

Economic Indicator	Actual 1985	RSQE Forecast		
		1986	1987	1988
GNP (billions of current dollars)	3998.1	4183.1	4388.8	4705.2
GNP Deflator (% change)	3.3	2.2	2.0	3.7
Real GNP (billions of 1982 dollars)	3585.2	3669.6	3775.4	3904.7
Civilian Unemployment Rate (%)	7.2	7.1	7.2	6.9
Capacity Utilization, Manufacturing (%)	80.3	78.8	79.8	82.4
Auto Sales (millions of units)	11.0	10.8	10.6	10.7
Private Housing Starts (thousands of units)	1735	1924	1968	1925
3-Month Treasury Bill Rate (%)	7.5	6.0	5.2	5.4
Aaa Corporate Bond Rate (%)	11.4	8.9	7.9	7.5
Real Disposable Income (billions of 1982 \$s)	2528.0	2616.7	2686.3	2719.7
Corporate Profits Before Tax (billions of current dollars)	223.2	235.2	245.9	281.6
Federal Deficit (Fiscal Year, billions of current dollars)	191.2	216.0	177.0	143.4

Buying Attitudes Set New Records—Yet Again

Richard T. Curtin
Survey Research Center
The University of Michigan

Sustained Period of Confidence

In the second quarter 1986 survey, the Index of Consumer Sentiment was 96.8, up from 95.5 in the first quarter and 91.1 at the close of 1985. During the past thirteen quarters the Index has remained in the relatively narrow range of 91.1 to 99.5, the longest period of such high consumer confidence levels since the mid-1960s.

Among families with incomes of \$30,000 or more, the Index of Consumer Sentiment stood at 105.9 in the most recent survey, just below the 106.8 recorded in the first quarter. Since the cyclical peak was recorded in the first quarter of 1984, the loss in confidence has been somewhat greater among high income families (from 115.9 to 105.9) than among families with incomes under \$30,000 (from 93.7 to 89.7).

Favorable Buying Attitudes Continue to Set New Records

Buying conditions for homes, vehicles, and major household durables were viewed more favorably in the second quarter 1986 survey than at any other time in the history of these surveys. Overall, three-in-four families thought that current buying conditions were favorable. These very favorable perceptions were due to declines in interest rates as well as the continued availability of price discounts.

Attitudes toward buying conditions have followed a remarkable course during the past three years. From the all-time low levels recorded during the last recession, favorable buying attitudes rose rapidly; and by mid-1984 they had become more favorable than at anytime during the prior decade. In late 1983, favorable buying attitudes declined by a small amount, only to be followed by a resurgence to new highs in the first half of 1984. This same pattern of small decline followed by a resurgence was repeated in 1985 and

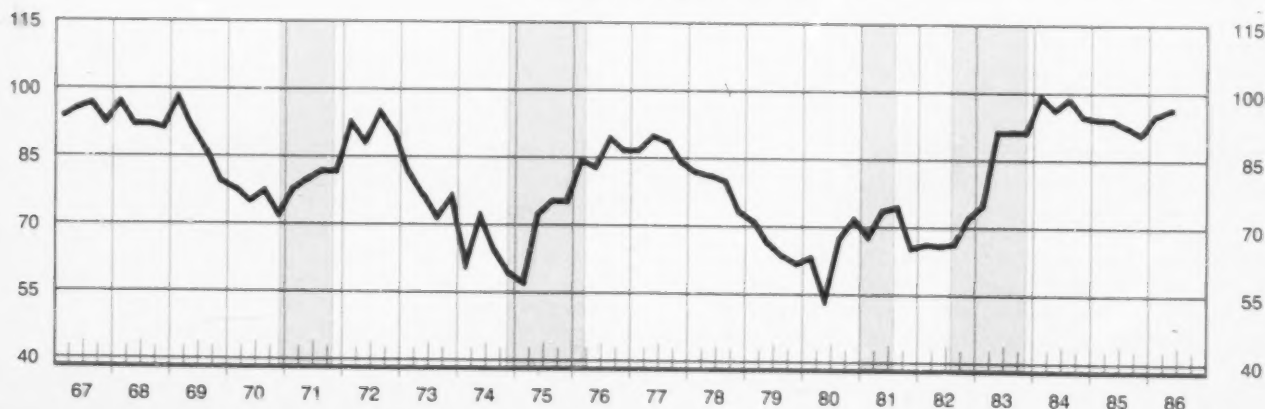
1986. Although this pattern has led to the establishment of ever higher peaks during the past three years, the net yearly improvement since 1983 has been small.

The same factors that were responsible for the initial rise in favorable buying attitudes have also been responsible for the maintenance of these attitudes at record levels during the past three years. Price discounts and the declines in interest rates have been the two reasons most consistently cited by consumers for their very favorable attitudes. And the small declines and subsequent rebounds in attitudes during the past three years have been due to changes in the availability of discounts on prices and interest rates. When price discounts have been withdrawn, or when interest rates have edged upward, consumers have reacted by postponing purchases. This reaction is quite different from prior expansions, when consumers reacted to increased prices by stepping up demand, in anticipation of even higher prices in the future. Such buy-in-advance rationales depended on the expectation of ever-escalating prices. In sharp contrast, consumers now expect relatively low rates of inflation during the years ahead. Moreover, consumers now expect sellers to react to sluggish sales by offering renewed and possibly larger discounts, thus giving consumers reason for postponement in the hope of future discounts. While the reaction of consumers to inflation in the 1970s tended to accelerate and exaggerate economic cycles, the current reaction by consumers tends toward dampening cyclical increases as well as declines.

Homes. Favorable attitudes toward buying conditions for homes were held by more families than ever before in the history of these surveys. In the second quarter 1986 survey, 85 percent of all families thought that home buying conditions were favorable, up from the prior record of 76 percent recorded just one quarter earlier, and the 64 percent recorded one year earlier. Only 12 percent of all families reported unfavorable home buying conditions in the second quarter,

INDEX OF CONSUMER SENTIMENT

February 1966 = 100



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

down from 21 percent one quarter earlier, and 32 percent one year earlier. Overall, during the past five years the proportion of families that held favorable views of home buying conditions has more than quadrupled—rising from under 20 to over 80 percent.

The primary factor behind these very favorable attitudes has been reduced mortgage interest rates. In the second quarter 1986 survey, 77 percent of all families referred to the availability of reduced interest rates when asked to explain their views, up from 63 percent one quarter earlier, and 40 percent one year earlier. Just 5 percent of all families complained about high mortgage interest rates in the most recent survey. This domination of home buying attitudes by declines in mortgage rates is the reverse of the situation recorded five years earlier, when just one percent of all families mentioned low rates, and 75 percent complained about high mortgage rates.

In addition to reduced mortgage rates, consumers hold favorable perceptions of market prices for homes. In the second quarter 1986 survey, 21 percent referred to the availability of good buys on homes, while just 6 percent complained about high prices. This was the most favorable balance of opinion recorded since the 1950s—largely due to the very small number of complaints about rising home prices.

Vehicles. Favorable attitudes toward car buying conditions were held by 75 percent of all families in the second quarter 1986 survey, the highest proportion ever recorded. This was slightly above the prior records of 72 percent recorded one quarter earlier, and 67 percent recorded one year earlier. A record 56 percent of all families in the most recent survey reported the availability of reduced interest rates offered by vehicle manufacturers, twice the 26 percent recorded one year earlier. Just 3 percent of all families complained about high interest rates on vehicle loans in the second quarter 1986 survey.

The availability of price discounts on vehicles was mentioned by 24 percent of all families in the second quarter 1986 survey, slightly below the 26 percent recorded one year earlier; complaints about high prices, however, declined during the past year to 12 from 19 percent, yielding a more positive balance of opinion than anytime since the 1960s.

Durables. Buying conditions for large household durables were viewed favorably by 77 percent of all families in the most recent survey, unchanged from the first quarter reading, and the highest level ever recorded. The availability of discounted prices on household durables was mentioned by 34 percent of all families in the second quarter 1986 survey, down from 39 percent one quarter earlier, and 37 percent one year earlier. This small decline was offset, however, as references to the availability of reduced interest rates rose to a record 29 percent in the second quarter of 1986, from 19 percent one quarter earlier, and 10 percent one year earlier.

Favorable Financial Situation Expected to Remain Unchanged

Consumers' evaluations of their personal financial situation remained favorable in the second quarter 1986 survey. Among all families, 45 percent reported that their financial situation had improved during the past year, just above the 44 percent recorded one quarter earlier, and the 41 percent recorded one year earlier. The proportion of families that reported increases in their family income was 34 percent in the most recent survey, just ahead of the 32 percent recorded one year earlier. Importantly, few consumers complained

about the erosion of living standards due to inflation: just 11 percent in the second quarter survey, unchanged from the first quarter reading, and the lowest level recorded in more than two decades.

Consumers continued to hold a favorable outlook for their own financial situation during the year ahead. Among all families in the second quarter 1986 survey, 39 percent expected improvement in their financial situation, compared with just 11 percent that expected a worsened financial situation during the year ahead. Income increases were expected about as frequently in the most recent survey as one year earlier (59, up from 57 percent), although the size of the expected annual increase remained small. The median increase expected in nominal family income across all households was 3.2% in the second quarter. This was just half of a percentage point above the median inflation expectation of 2.7%. As a result, real income was widely expected to remain unchanged at current levels during the year ahead by 44 percent of all families in the second quarter survey. Only about half that many families expected real income increases (21 percent).

Given the widespread financial progress reported during the past few years, prospects for an unchanged financial situation during the year ahead have continued to support the willingness of consumers to make major purchases. Willingness to incur new debt in order to make major purchases was reported by 35 percent of all families at mid-1986, up from 28 percent one year earlier, and the highest level in more than five years. Willingness to withdraw money from accumulated savings to finance major purchases was reported by 41 percent of all families in second quarter 1986, just above the year-earlier reading of 38 percent. These spending plans, however, are held with the expectation of only small future increases in income, and thus shift the emphasis in decisions concerning the affordability and timing of purchases to the availability of discounted prices and low interest rates.

Evaluations of the Economy: Favorable, with Changed Rationale

The proportion of consumers that had heard news about favorable changes in business conditions rose to 46 percent in the second quarter 1986 survey, from 31 percent at year-end 1985. Most of the increase in favorable news reports involved declines in prices and interest rates. Overall, 58 percent of families in the second quarter survey thought that business conditions in the country as a whole had improved during the past year, up from the recent low of 49 percent at the close of 1985. Further improvement in the economy during the year ahead was expected by about half as many consumers as reported improvement during the past year. In the most recent survey, 27 percent of all families expected the economy to improve during the year ahead, between the 26 percent recorded one quarter earlier and the 28 percent recorded one year earlier. However, only 14 percent of all families in the second quarter of 1986 expected worsening economic conditions during the year ahead, just below the 15 percent recorded both one quarter and one year earlier. For the fourth consecutive quarter, the majority of families expected the performance of the national economy to remain unchanged during the year ahead—57 percent in the second quarter survey.

This outlook for slow but continued economic growth has meant to consumers the continuation of good times financially in the country as a whole. Among all families in the

second quarter 1986 survey, 61 percent thought that economic conditions would remain "good" during the year ahead, up from the recent low of 53 percent at the end of 1985. While consumers do not see a recession on the near-term horizon, they do not expect economic growth to continue indefinitely over the longer term. More families in the second quarter survey expected an economic downturn sometime during the next five years or so than expected continuous growth that far into the future (42 versus 38 percent). With this perspective, the expectation of continued slow economic growth during the year ahead may be viewed as a welcome hiatus. Following more than a decade of volatile and uncertain times, it is the absence of such adversity and instability that now forms the threshold for favorable evaluations of the economy.

The major concern with the long-term vitality of the domestic economy involves job prospects. Slow economic growth was expected to result in no further declines in unemployment. The majority of families expected the national unemployment rate to remain at about its current level during the year ahead. Expectations concerning the national unemployment rate have remained largely unchanged during the past two years. Among all families in the second quarter 1986 survey, 53 percent expected the rate of unemployment to remain unchanged during the year ahead. During the past two years, this figure has remained in the narrow range of 50 to 54 percent. Increases in unemployment during the year ahead were expected by 30 percent in the second quarter of 1986, compared with 16 percent that expected the unemployment rate to decline.

Confidence in government economic policies to control inflation and unemployment remained at very high levels in the most recent survey. Among all families, 31 percent favorably rated government economic policies, up from 27 percent in the first quarter, and just below the recent peak of 33 percent.

Summary Outlook

The second quarter 1986 survey indicates the continuation of the longest period of consumer confidence since the mid-1960s. For more than three years, consumer sentiment has remained at very favorable levels due to sustained declines in inflation and interest rates. Attitudes toward buying conditions reached new record levels in the recent survey, as consumers expected the availability of discounts on prices and interest rates to remain widespread. Consumers expected the growth in the domestic economy to remain slow during the year ahead, resulting in no further declines in the national unemployment rate. In addition, only small improvements in their own financial situation were expected during the year ahead. Importantly, however, few consumers expected reversals in either their personal financial situation or in the economy as a whole.

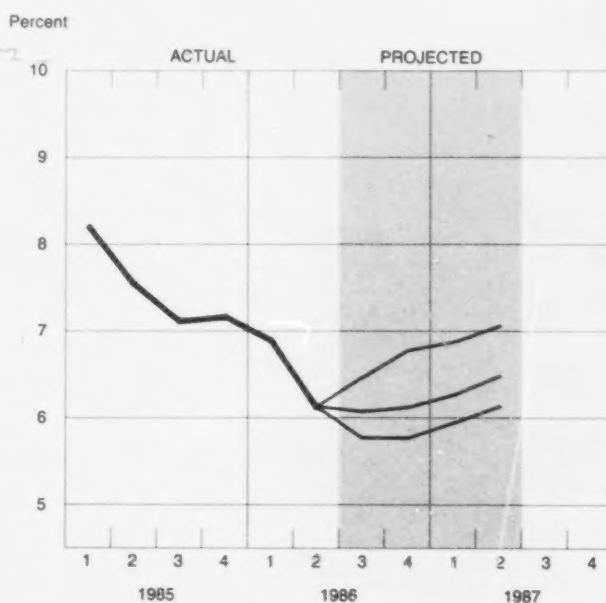
The uncharacteristic aspect of this long expansion is that consumers' assessments have remained favorable despite the expectation of little if any real improvement in their own financial situation or in the overall economy. In an earlier era, the expectation of a stagnant economy would have been a serious cause for concern, and would have resulted in a sharp loss in consumer confidence. Times change, and so do people's standards of comparison. The decade of the 1980s began with a much changed perspective when compared with the 1970s. Following a long period of rapid and sustained economic growth in the 1950s and 1960s, the 1970s witnessed a prolonged series of economic adversities, amid widespread

uncertainty and confusion. This situation was quite a departure from what many had experienced and had come to expect from the economy. This resulted in steep declines in sentiment and, because of the persistent sense of uncertainty, more volatile changes in attitudes and behavior.

In contrast, the performance of the economy in the 1980s follows a decade when many feared that double digit inflation, unemployment, and interest rates would become a permanent feature of the economy. That these concerns have not been confirmed has lessened these fears, but it has not led consumers to now expect a return to the prior high levels of economic performance. At present, assessments do not depend as much on whether the economy is meeting its potential for growth, as on whether the economy can avoid the adversities of the past decade. Importantly, a renewed sense of stability in the economy—even if stagnant—has helped to insulate consumer attitudes from volatile changes. Slower growth has not yet been viewed as a signal of an impending recession, as was often true in the past; and spending cutbacks are not now planned by consumers as a precaution against possible economic reversals. Indeed, consumers expect the sluggish economy to keep pressure on sellers to offer purchase incentives on prices and interest rates, and thus maintain favorable buying conditions during the year ahead. Since consumers expect only small improvements in their financial situation during the year ahead, these survey results point toward diminished growth but still favorable levels of consumer sales through early 1987.

August 1986

3-MONTH TREASURY BILL RATE



Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

Lifecourse Migration and Redistribution of the Elderly Across U.S. Regions and Metropolitan Areas*

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The increased "footlooseness" of the elderly population along with the recognition that this population will grow substantially in the foreseeable future has prompted a flurry of interest in the study of patterns, trends, and demographic components of change in this population's geographic distribution.¹ Among the most significant of the findings that this emerging research program has brought to light is that the elderly population—rather than remaining "left behind" as in major redistribution epochs in the nation's past—appears to have participated fully in the pervasive metropolitan deconcentration that has touched practically all segments of the population and national territory since 1970.² In fact, the evidence suggests that the elderly played a pioneering role in this new redistribution tendency, having exhibited the metropolitan-nonmetropolitan "turnaround" already in the 1960s.³ Clearly, the full-fledged participation in the deconcentration phenomenon on the part of a rapidly growing elderly population holds important implications for the tax bases, demographic compositions, and social service requirements of large and small places alike,⁴ and underscores the need for a continuing assessment of elderly redistribution tendencies.

While the studies undertaken thus far have shed a great deal of light on the trends and components of change in the elderly population's distribution, most have taken a fairly restricted view of the migration component by focusing only on the migration of the elderly. These studies generally examine the natural increase and migration components of the *age-delimited* elderly (65 and over) population where the "birth" component of natural increase pertains to "aging-in-place" of some portion of the under-65 population into the 65-and-over category, while the death and migration components pertain specifically to the 65-and-over population. The migration contribution in such an examination is restricted because the earlier lifetime migration experiences which affect the size of an area's "aging-in-place" population are left out of the analysis. This omission is especially crucial when the size of the "aging-in-place" population is large and represents the dominant component of change in the size of an area's elderly population.

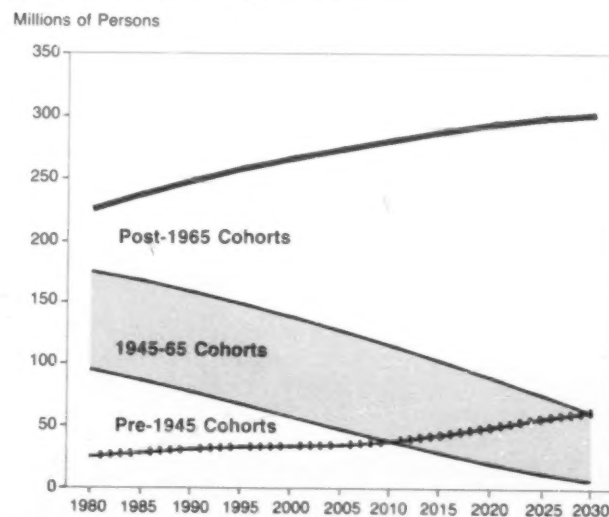
An alternative view of migration's contributions to elderly population change follows a lifecourse perspective and treats the elderly population, at a given point in time, as a *cohort-delimited* population. According to this perspective, the geographic distribution of the elderly population, at that

time, is affected by the *lifecourse migration patterns* of these particular cohorts both prior to and after their entry into the elderly age category. This more comprehensive view of migration's impact on elderly redistribution patterns takes cognizance of the fact that the vast number of a cohort's lifetime moves take place during the early and middle-aged adult years rather than during elderly (ages 65 and over) years.

The lifecourse perspective is a particularly valuable one to take when (1) the cohorts under examination are large in size, and, therefore, likely to contribute substantially to elderly population growth as they pass into the 65-and-over ages; and (2) the cohorts under examination display lifecourse migration patterns that lead to very different geographic redistribution tendencies than those of earlier cohorts. Both of these conditions appear to apply to the baby-boom cohorts (broadly defined as those born between 1945 and 1965), and thus the present paper focuses on these cohorts in order to demonstrate how lifecourse migration patterns affect the redistribution of the elderly population.

The impact of the large baby-boom cohorts for the elderly population, nationwide, is illustrated in Chart 1, which displays projections through the year 2030 of the total population and the elderly population (ages 65 and over). The plot also shows, in lexis diagram format, the aging of the baby-boom cohorts between 1980, when these cohorts range in age

CHART 1. Projected Population Size for Total Population and Elderly Population (Ages 65 and Over), 1980-2030



Notes: (1) Shaded area represents the aging of the Baby Boom cohorts (1945-65 cohorts) as they progress from ages 15-34 in 1980, through ages 65-84 in 2030. (2) Vertical distance from the time axis to the ticked data line indicates the number of persons ages 65 or more, while the distance from the ticked line to the thick data line (top) indicates the number of persons with ages less than 65.

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¹See, for example, Golant, 1979; Longino and Jackson, 1980; Biggar et al., 1982; Heaton, 1983; McCarthy, 1983.

²See Long, 1981; Fuguitt, 1985.

³See Fuguitt and Tordella, 1980; Lichter et al., 1981; Longino et al., 1984.

⁴See Heaton, 1983.

from 15 to 34, through 2030, when their ages range between 65 and 84. The plot clearly indicates the significant contribution that these large-sized cohorts make to the elderly population between the years 2010 and 2030—the period during which all baby-boom cohort members graduate into the 65-and-over age category.⁵

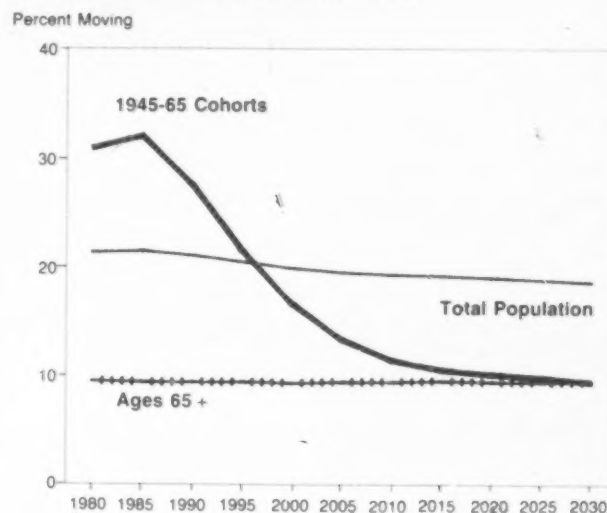
While the sheer size of the baby-boom cohorts, alone, provides sufficient justification for examining their pre-elderly migration patterns, another justification lies with suggestions that the lifecourse migration pattern followed by these cohorts should lead to a far more deconcentrated redistribution of cohort members than has been the case with previous cohorts. The new redistribution tendencies, from core-to-peripheral regions and down the metropolitan hierarchy, have been exhibited by most of the population (of all ages) since 1970. However, the fact that the baby-boom cohorts were still in their early adult years during this period—and just entering into their “peak migration” ages—places them in a position to become the first cohorts to exhibit the new deconcentrated redistribution tendencies over the entirety of their adult lifecourse.⁶ Given the long lead time between a cohort’s peak mobility years and its entry into the elderly population age categories (illustrated in Chart 2), the baby-boom cohorts—by exhibiting “new” redistribution tendencies throughout their lifecourse—may become distributed across areas quite differently than their predecessor cohorts *before* passing into the 65-and-older age categories.

The preceding discussion asserts that the baby-boom cohorts, by virtue of their large size and new lifecourse redistribution tendencies, are likely to initiate significant shifts in the distribution of the elderly population as these cohorts enter into the 65-and-older age categories. In order to investigate this assertion (and also to demonstrate our contention that cohorts’ pre-elderly lifecourse migration patterns should be incorporated into studies of elderly population distribution shifts), this analysis will address the following questions:

- 1) Will the new lifecourse migration patterns provide for a more deconcentrated redistribution of the baby-boom cohorts, both prior to and after their entry into the elderly age categories, than the lifecourse migration patterns followed by earlier cohorts?
- 2) Will the new lifecourse distribution patterns lead, in the long run, to a significantly more deconcentrated distribution of the elderly population?

Our examination of both questions focuses, largely, on redistribution across nine broad regional and metropolitan area groupings defined on the basis of three census regions—the North (combining the Northeast and Midwest census regions), the South, and the West; and three categories of metropolitan status—large metropolitan areas (those with 1980 populations exceeding 1 million), other metropolitan areas, and nonmetropolitan areas. (See Table 1 footnotes for further details.) Within these groupings, the hypothesized deconcentration tendencies—consistent with observed nation-

CHART 2. Percent Moving between Counties During Previous 5-Year Interval, Projected for Total Population, Elderly Population, and Baby-Boom Cohorts, 1980-2030



wide post-1970 shifts—should lead to greater growth in the South and West regions at the expense of the North (“core to periphery” regional redistribution), and greater growth in small and nonmetropolitan areas at the expense of large metropolitan areas (redistribution “down the metropolitan hierarchy”). Greatest losses are, therefore, expected for large metropolitan areas while greatest gains, according to the deconcentration hypothesis, are anticipated in nonmetropolitan areas within the South and West. In selected portions of the analysis, redistribution patterns for the 35 large individual metropolitan areas are presented in order to point up variations that occur across individual areas, but within regions.

Population Redistribution of the Baby-Boom Cohorts

Our analysis of question 1 cannot be based on the lifecourse migration experiences of actual cohorts, since appropriate migration data are not available in this form. Rather than attempting to construct bona fide cohort-specific migration patterns, our comparison of “new” versus “old” lifecourse migration patterns will contrast the census-based age-specific migration stream rates, registered over the 1975-80 period, with those registered over the 1965-70 period. Given the sharp and broad-based shift toward deconcentrated redistribution which characterized practically all segments of the population during the 1970s, we will assume that the age-specific migration pattern observed over the 1975-80 period approximate, in broad measure, the more deconcentrated redistribution tendencies which will be adopted by the baby-boom cohorts (and their successors) over the remainder of their lifecourse. Alternatively, the 1965-70 age-specific rates, registered prior to national deconcentration shifts, come closer to approximating the “older” lifecourse patterns that characterize the mobility experiences of cohorts that will precede the baby-boom cohorts into the 65-and-older age category.

⁵These plots are scaled to projections which appear in U.S. Bureau of the Census (1984), based on the middle series survival rates and middle series fertility rates employed therein.

⁶This assertion assumes the post-1970 deconcentration tendencies will continue to occur over the foreseeable future. This view is consistent with those espoused by Long (1981), Wardwell (1980), and others who link these deconcentrated redistribution tendencies to technological innovations in transportation, communication, and production which have served to reduce the significance of physical distance over time. Nevertheless, recent evidence suggests some moderation of these deconcentration tendencies in the post-1980 period (see Engels and Forstall, 1985; Richter, 1985).

TABLE 1. Age-specific Net Migration as Percentage of Beginning of Period Populations for Regional Metropolitan and Nonmetropolitan Area Groupings, 1965-70 and 1975-80¹

Metropolitan Area Groupings and Age at End of Period	North		South		West	
	1965-70	1975-80	1965-70	1975-80	1965-70	1975-80
Large Metro. Areas²						
5-9	-1.4	-4.3	+5.7	+2.0	+2.4	-0.4
10-14	-1.5	-4.3	+4.7	+1.4	+2.1	-0.8
15-19	-3.4	-6.5	+3.2	-0.6	+4.4	+0.3
20-24	-2.4	-7.3	+12.6	+5.6	+13.5	+6.7
25-29	+2.1	-2.9	+12.7	+9.7	+8.2	+6.1
30-34	-1.8	-5.5	+6.7	+3.3	+3.4	+1.7
35-39	-1.8	-4.9	+5.7	+2.0	+2.5	+0.1
40-44	-1.5	-4.0	+5.0	+1.8	+2.3	-0.2
45-49	-1.3	-3.3	+3.8	+1.4	+1.8	+0.0
50-54	-1.4	-3.5	+3.6	+1.2	+1.5	-0.4
55-59	-2.1	-4.5	+3.7	+1.4	+1.1	-0.9
60-64	-4.0	-6.4	+6.0	+2.9	+1.0	-0.9
65-69	-5.7	-7.4	+9.3	+4.9	+1.7	+0.0
70+	-2.8	-3.4	+6.1	+3.2	+2.1	+1.4
Other Metro. Areas²						
5-9	+0.7	-1.0	-1.1	+0.4	+0.8	+3.7
10-14	+0.0	-1.2	-0.5	+1.9	+1.6	+4.3
15-19	+2.6	+1.3	+4.1	+6.1	+4.4	+6.9
20-24	+0.8	+0.8	+10.8	+9.2	+13.4	+13.4
25-29	-0.9	-5.2	-5.1	-1.1	-3.3	+2.7
30-34	+0.7	-2.0	-1.4	+0.6	-0.1	+4.7
35-39	+0.2	-1.6	-0.5	+2.1	+0.9	+5.1
40-44	+0.1	-1.3	-0.1	+1.9	+0.7	+4.1
45-49	-0.5	-1.4	+0.6	+2.1	+0.8	+3.5
50-54	-0.4	-1.3	+1.1	+2.3	+1.0	+3.4
55-59	-0.3	-1.7	+1.5	+3.4	+1.7	+4.7
60-64	-1.3	-2.4	+2.8	+5.0	+3.0	+5.7
65-69	-1.8	-2.5	+3.9	+5.9	+4.1	+5.9
70+	-0.4	-0.7	+2.8	+3.2	+3.5	+3.4
Nonmetro. Areas						
5-9	+0.4	+1.8	-2.1	+3.6	-2.2	+7.6
10-14	+0.2	+1.5	-1.2	+4.0	-1.2	+7.8
15-19	-2.1	+0.3	-3.0	+3.2	-3.8	+4.1
20-24	-14.8	-8.1	-14.2	-3.5	-11.4	+2.8
25-29	-5.4	-3.2	-8.4	-0.6	-6.6	+6.7
30-34	-0.3	+1.8	-2.2	+4.2	-2.7	+10.6
35-39	-0.3	+1.4	-0.9	+4.5	-1.2	+9.0
40-44	-0.6	+0.8	-1.0	+4.3	-2.0	+5.7
45-49	-0.6	+0.4	-0.5	+3.7	-1.1	+4.5
50-54	-0.5	+0.7	-0.1	+4.4	-0.2	+6.3
55-59	+0.2	+1.2	+0.6	+5.4	+0.5	+7.8
60-64	+1.6	+1.9	+2.1	+6.7	+1.4	+8.5
65-69	+1.8	+1.5	+2.4	+5.3	+2.3	+6.0
70+	-0.5	-0.5	-0.4	+1.1	-0.6	+1.2

¹Metropolitan areas are defined in terms of 1980 SMSAs, SCSAs and, in New England, NECMA approximations to SCSAs. (The New York SCSA, as defined here, excludes territory in New England.) Regions are consistent with census regions ("North" combines the census Northeast and Midwest regions) except where census region boundaries bisect individual SMSAs. In the latter case, the territory for the entire SMSA is assigned to the region in which most of its population resides.

²Metropolitan areas (defined in footnote 1) with 1980 populations greater than 1 million are classed as Large Metropolitan Areas; all others are classed as Other Metropolitan Areas.

The 1965-70 net migration rates (Table 1) point up the aggregate redistribution implications associated with the "old" lifecycle migration stream patterns. Among the rates for North large metropolitan areas, the only positive net migra-

tion is observed for the 25-29 age category—a reflection of the high in-migration from smaller and nonmetropolitan areas; while the greatest net out-migration rate is shown for the 65-69 age category—a reflection of the secondary peak

in gross out-migration from these areas. On the other hand, the rates for South nonmetropolitan areas are negative for all age categories under age 55, and most accentuated net out-migration is shown during the young-adult years. The positive net migration exhibited for the older adult and post retirement ages reflects the low out-migration rates from nonmetropolitan areas during these ages, and the slight peaking of in-migration for these years.

It is apparent from the net migration rates in Table 1 that the late 1970s exchanges have shifted significantly with respect to pre-elderly migration. From the perspective of large metropolitan areas, out-migration to small and nonmetropolitan areas has increased considerably in the late-young and middle-aged adult years, while the young adult "peak" in in-migration from smaller areas has dropped sharply. Hence, large areas are attracting fewer migrants from other areas in their young adult ages and losing more of them than before in their middle-aged years. Nonmetropolitan areas, in contrast, are losing fewer and gaining more pre-elderly migrants with the 1970s patterns than was the case with the 1960s patterns. The reduction in out-migration is occurring primarily in the young adult years, although it is also evident, to a lesser degree, among middle-aged adults. The increased in-migration occurs largely with middle-aged adults and reflects increased "down the hierarchy" out-movement from larger areas for these ages. Underlying migration stream data, not shown, indicate that South and West small metropolitan areas underwent pre-elderly shifts that were less accentuated but similar in direction to those shown for nonmetropolitan areas.

We turn now to alternative projections of the baby-boom cohorts' redistribution based on the "old" 1965-70 lifecourse migration rates (appearing in Table 2), and on the "new" 1975-80 rates (appearing in Table 3).⁷ These projections show that the "new" lifecourse patterns lead to a decidedly more deconcentrated redistribution of the baby-boom cohorts before they reach their elderly ages in year 2010. Under the "old" lifecourse patterns (in Table 2) these cohorts would continue to concentrate into South and West large metropolitan

areas at the expense of all other geographic areas—and even within the North region, small and nonmetropolitan areas lose population to a greater degree than the largest areas. However, under the "new" lifecourse patterns (in Table 3) the baby-boom cohorts become redistributed down the metropolitan hierarchy in all three regions—with greatest gains occurring in South nonmetropolitan and small metropolitan areas and West nonmetropolitan areas, and greatest losses occurring in North large metropolitan areas. Indeed, under the "new lifecourse" projections, the share of baby-boom cohort members that reside in sunbelt small and nonmetropolitan areas increases from 32 percent in 1980 to 37 percent, 30 years later. Under the "old lifecourse" projection, this share decreases over the 30 years to 27 percent.

Despite these differences in pre-elderly redistribution shifts, the alternative projections show a fairly similar redistribution of the baby-boom cohorts, across regions, after they reach age 65. The fifth column in Tables 2 and 3 shows that under both the "old" and "new" lifecourse redistribution patterns the baby-boom cohorts become deconcentrated "down the metropolitan hierarchy" as they begin passing into their elderly ages (between the years 2010 and 2030). Hence, while the overall 50-year redistribution shift (the sixth column in each table) shows a far less deconcentrated redistribution of the baby-boom cohorts to occur under the "old" lifecourse pattern than under the "new" one, most of the difference is attributable to the pre-elderly portion of the lifecourse.

These alternative projections of baby-boom cohort redistribution are consistent with the age-specific migration comparisons reviewed earlier. They indicate that only since 1970 do we find a strong tendency for pre-elderly lifecourse migration to lead to redistribution "down the metropolitan hierarchy" as well as toward the "peripheral" South and West regions. If the baby-boom cohorts do, indeed, adopt this more deconcentrated migration pattern over their lifecourse, they will become more heavily represented in South and West small and nonmetropolitan areas *before* they reach age 65 than would be the case if they adopted the older lifecourse pattern. Moreover, the baby-boom cohorts' continued "aging in place" along with their even further deconcentration between the years 2010 and 2030 will place 40 percent of their members in these "peripheral" small and nonmetropolitan areas.

TABLE 2. Projected Year 1980, 2010, and 2030 Distributions for Baby-Boom Cohorts Across Regional Metropolitan and Nonmetropolitan Area Groupings, Assuming 1965-70 Age-specific Migration Stream Rates

Area Groupings	Years			2010 minus 1980	2030 minus 2010	2030 minus 1980
	1980	2010	2030 ^a			
North Large Metro. Areas	25.0	24.8	21.8	-0.2	-3.0	-3.2
North Other Metro. Areas	12.3	12.0	11.4	-0.3	-0.6	-0.9
North Nonmetro. Areas	9.7	9.1	10.1	-0.6	+1.0	+0.4
South Large Metro. Areas	9.0	10.4	10.8	+1.4	+0.4	+1.8
South Other Metro. Areas	13.7	13.2	13.9	-0.5	+0.7	+0.2
South Nonmetro. Areas	10.3	9.7	11.2	-0.6	+1.5	+0.9
West Large Metro. Areas	12.2	13.5	13.2	+1.3	-0.3	+1.0
West Other Metro. Areas	4.5	4.2	4.3	-0.3	+0.1	-0.2
West Nonmetro. Areas	3.3	3.1	3.3	-0.2	+0.2	0.0
TOTAL	100.0	100.0	100.0			

^aIncludes pre-baby boom cohort members, aged 85+.

TABLE 3. Projected Year 1980, 2010, and 2030 Distributions for Baby-Boom Cohorts Across Regional Metropolitan and Nonmetropolitan Area Groupings, Assuming 1975-80 Age-specific Migration Stream Rates

Area Groupings	Years			2010 minus 1980	2030 minus 2010	2030 minus 1980
	1980	2010	2030 ¹			
North Large Metro. Areas	25.0	20.2	17.2	-4.8	-3.0	-7.8
North Other Metro. Areas	12.3	10.9	10.3	-1.4	-0.6	-2.0
North Nonmetro. Areas	9.7	9.6	10.2	-0.1	+0.6	+0.5
South Large Metro. Areas	9.0	9.9	10.0	+0.9	+0.1	+1.0
South Other Metro. Areas	13.7	14.8	15.8	+1.1	+1.0	+2.1
South Nonmetro. Areas	10.3	12.4	14.2	+2.1	+1.8	+3.9
West Large Metro. Areas	12.2	12.7	12.3	+0.5	-0.4	+0.1
West Other Metro. Areas	4.5	5.2	5.4	+0.7	+0.2	+0.9
West Nonmetro. Areas	3.3	4.3	4.6	+1.0	+0.3	+1.3
TOTAL	100.0	100.0	100.0			

¹Includes pre-baby boom cohort members, aged 85+.

Implications for Elderly Population Redistribution

Turning now to question 2 of this analysis, we wish to determine what the new lifecycle migration patterns imply for the redistribution of the elderly population per se over time. Clearly, the aging of the baby-boom cohorts should exert a particularly strong influence on this change due to their large sizes and the fact that they represent the first cohorts to exhibit the new redistribution patterns over the entirety of their adult lifecycle. Yet older cohorts, preceding the baby-boom cohorts, should also contribute to an altered redistribution of the elderly population, since the "new" deconcentrated migration patterns are likely to characterize some portion of these cohorts' pre-elderly lifecycle migration experiences.

Our examination of question 2 will consist of projecting ahead the elderly population between 1980 and 2030, assuming that all cohorts will adopt either the "new" or "old" lifecycle migration patterns discussed earlier. This will allow us to compare differences in elderly geographic distribution that are directly attributable to the new lifecycle patterns. We will then attempt to identify the contributions to these differences made by the baby-boom cohorts.

The alternative projections for the elderly population appear in the middle columns of Table 4 (for the reader's information, like projections for the total population are shown in the left-hand panel). Comparisons between the two projections show distinct and significant shifts in the redistribution of the elderly, such that the projection based on the 1975-80 migration rates leads toward a greater elderly growth in South and West small metropolitan and nonmetropolitan areas. Both projections show greater than average elderly population growth in the South and West; yet those based on the "older" lifecycle patterns show a higher concentration in large sunbelt metropolitan areas, while those based on the "newer" patterns show greatest growth in West small and nonmetropolitan areas and South nonmetropolitan areas.

A link between these projected shifts in elderly population redistribution and similar shifts for baby-boom cohorts is suggested in the right-hand panel of Table 4. While both projections of the baby-boom cohorts show these cohorts to decline in size over time (due to mortality), the differences in their relative change across areas—associated with the two

projections—is consistent with the differences across areas in the elderly projections. Both the elderly and baby-boom projection comparisons (the sixth and ninth columns in the table) show the same area groupings to exhibit the largest gains (i.e. West small and nonmetropolitan areas and South nonmetropolitan areas) and losses (i.e. North large metropolitan areas and North other metropolitan areas) with the "newer" lifecycle migration patterns. Similar gain and loss tendencies across the elderly and baby-boom projections are evident for individual metropolitan areas in Table 4.⁸

Conclusion

The intent of this paper has been to demonstrate the significance of pre-elderly lifecycle migration for the redistribution of the elderly population, in response to a flurry of research which has restricted its focus to the migration of the elderly population per se. In making this point, we have focused on the potential contributions of the baby-boom cohorts, which, by virtue of their large size and the more deconcentrated lifecycle migration patterns they are likely to follow, can considerably alter the geographic distribution of the elderly population as these cohorts pass into the elderly ages.

While the implicit assumption we have made throughout—that the baby-boom cohorts (and their successors) will adopt the more deconcentrated lifecycle migration patterns of the 1970s—may or may not come to pass, it is clear that the "aging" of the large baby-boom cohorts will strongly affect the sizes of the elderly populations and the elderly shares of the total populations in all areas of the country. Most certainly, the pre-elderly migration patterns of these cohorts—whatever form they take—will play a dominant role in their geographic distribution as they pass into their elderly years. These results imply that greater attention should be given to migration, over the entirety of the lifecycle, in future studies of elderly population redistribution.

⁸The projections for each of the 35 individual metropolitan areas are performed separately based on a 10-area regional system. One of the 10 areas consisted of the individual metropolitan area that was being projected, while the remaining nine areas represented the nine regional and metropolitan area groupings used in other projections (for territory that lay outside of the individual metropolitan area). This "collapsing" of the projection areas was necessitated by limitations in the projection program.

TABLE 4. Projected Percent Change, 1980-2030, of Total Population, Elderly Population, and Baby-Boom Cohorts for Regional Metropolitan and Nonmetropolitan Groupings and Individual Metropolitan Areas, with Alternate Projections Assuming Age-Specific Migration Stream Rates for 1965-70 and 1975-80

Areas	Projected Percent Change over Years 1980-2030								
	Total Population			Elderly Population			Baby-Boom Cohorts ¹		
	Assume 1965-70 Rates	Assume 1975-80 Rates	Differ- ence	Assume 1965-70 Rates	Assume 1975-80 Rates	Differ- ence	Assume 1965-70 Rates	Assume 1975-80 Rates	Differ- ence
Regional and Metropolitan Area Groupings									
North Large Metro.	+17.5	-12.3	-29.8	+117.7	+71.9	-45.8	-29.1	-44.0	-14.9
North Other Metro.	+23.6	+10.1	-13.5	+140.5	+116.9	-23.6	-24.2	-31.6	-7.4
North Nonmetro.	+6.3	+11.7	+5.4	+99.5	+100.2	+0.7	-14.8	-14.5	+0.3
South Large Metro.	+52.3	+44.1	-8.2	+238.6	+210.5	-28.1	-1.4	-9.5	-8.1
South Other Metro.	+27.6	+48.8	+21.2	+185.5	+227.9	+42.4	-17.6	-5.3	+12.3
South Nonmetro.	+7.6	+46.9	+39.3	+123.8	+185.1	+61.3	-11.9	+12.2	+24.1
West Large Metro.	+51.3	+40.6	-10.7	+227.6	+205.2	-22.4	-11.7	-17.8	-6.1
West Other Metro.	+27.8	+64.3	+36.5	+210.7	+286.3	+75.6	-22.5	-3.7	+18.8
West Nonmetro.	+12.0	+69.1	+57.1	+164.5	+268.1	+103.6	-19.3	+12.3	+31.6
TOTAL	+24.5	+24.5	0.0	+152.9	+152.9	0.0	-18.5	-18.5	0.0
Metropolitan Areas									
New York ²	-2.9	-31.9	-43.0	+74.1	+28.6	-45.5	-35.9	-52.7	-16.8
Chicago ²	11.1	-14.2	-25.3	+118.8	+78.2	-40.6	-38.2	-49.7	-11.5
Philadelphia ²	+32.5	-3.7	-36.2	+149.0	+95.3	-53.7	-16.1	-34.2	-18.1
Detroit ²	+28.8	-9.1	-37.9	+151.7	+97.1	-54.6	-33.8	-48.2	-14.4
Boston ³	+21.1	-6.1	-27.2	+106.0	+70.2	-35.8	-30.7	-42.7	-12.0
Cleveland ²	+22.6	-18.6	-41.2	+127.9	+68.5	-59.4	-25.4	-44.9	-19.5
St. Louis	+26.7	-1.8	-28.5	+134.2	+96.2	-38.0	-19.3	-32.4	-13.1
Pittsburgh	+2.2	-11.9	-14.1	+86.7	+62.1	-24.6	-23.7	-33.9	-10.0
Minn.-St. Paul	+42.6	+18.4	-24.2	+176.4	+152.0	-24.4	-30.9	-37.0	-6.1
Cincinnati ²	+25.5	+8.1	-17.4	+159.9	+121.8	-38.1	-22.1	-33.6	-11.5
Milwaukee ²	+14.4	-7.4	-21.8	+127.5	+82.6	-44.9	-29.0	-43.0	-14.0
Kansas City	+31.3	+10.4	-20.9	+165.4	+137.6	-27.8	-21.4	-29.6	-8.2
Buffalo	+7.8	-28.7	-36.5	+99.3	+43.0	-56.3	-26.4	-47.2	-20.8
Indianapolis ²	+29.4	+13.4	-16.0	+173.9	+143.9	-30.0	-23.0	-31.4	-8.4
Providence ³	+16.8	-1.1	-17.9	+104.3	+80.1	-24.2	-18.3	-27.9	-9.6
Columbus	+33.4	+11.5	-21.9	+189.6	+151.5	-38.1	-34.0	-42.6	-8.6
Hartford ³	+37.9	+3.2	-34.7	+156.1	+114.0	-42.1	-16.2	-30.0	-13.8
Dayton ²	+42.1	-1.1	-43.2	+189.5	+125.1	-64.4	-16.5	-35.1	-18.6
Houston ²	+54.0	+83.0	+29.0	+372.3	+383.4	+11.1	-23.1	-21.3	+1.8
Washington, D.C.	+65.1	+6.7	-58.4	+268.5	+157.1	-111.4	-26.8	-48.9	-22.1
Dallas-Ft. Worth ²	+72.1	+70.3	-1.8	+305.3	+298.9	-6.4	-10.0	-11.4	-1.4
Miami ²	+42.2	+29.2	-13.0	+173.0	+136.3	-36.7	+63.0	+41.1	-21.9
Baltimore	+35.0	+18.0	-17.0	+190.7	+153.6	-37.1	-18.0	-28.4	-10.4
Atlanta	+61.5	+58.5	-3.0	+305.5	+307.8	+2.3	-17.9	-17.5	+0.4
Tampa-St. Pete	+52.2	+68.0	+15.8	+200.0	+199.0	-1.0	+123.0	+122.2	-0.8
New Orleans	+15.5	+26.9	+11.4	+177.8	+178.6	+0.8	-29.9	-29.7	+0.2
San Antonio	+32.9	+39.9	+7.0	+214.5	+239.4	+24.9	-21.9	-15.7	+6.2
L.A.-Long Beach ²	+42.4	+18.9	-23.5	+219.0	+158.6	-60.4	-13.5	-29.9	-16.4
S.F.-Oakland ²	+57.8	+24.7	-33.1	+211.5	+165.0	-46.5	-13.1	-26.0	-12.9
Seattle-Everett ²	+91.3	+74.9	-16.4	+276.6	+266.5	-10.1	-2.6	-5.2	-2.6
San Diego	+51.7	+62.2	+10.5	+252.5	+279.3	+26.8	-9.1	-2.2	+6.9
Denver-Boulder	+38.0	+57.0	+19.0	+255.9	+275.1	+19.2	-30.3	-26.5	+3.8
Phoenix	+30.1	+86.2	+56.1	+189.9	+322.6	+132.7	-5.4	+37.9	+43.4
Portland	+61.1	+77.7	+16.6	+244.3	+238.8	-5.5	+2.7	+1.0	-1.7
Sacramento	+30.5	+68.3	+37.8	+186.3	+307.6	+121.3	-26.6	+4.5	+31.1

¹The year 2030 population, used in these calculations, includes pre-baby boom cohort members, aged 85 +.

²SCSA (New York SCSA, as defined here, excludes territory in New England).

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Assessing Black Progress: Voting and Citizenship Rights, Residency and Housing, Education*

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Introduction

The Rand Corporation report about racial differences, released earlier this year, generated a new controversy about the changing status of blacks. The authors, Smith and Welch, focused on those men who worked at least one-half time during the year before the censuses of 1940 to 1980, and concluded that the economic position of blacks improved because racial differences in earnings declined drastically. Indeed, black wages as a proportion of white wages increased from 44 percent in 1940 to 73 percent in 1980.¹

*This article will conclude in the next issue with a discussion of black progress in the areas of employment, occupation, earnings, family income, and poverty.

Arguing that the report gave an erroneously optimistic picture of racial change, civil rights organizations and other analysts have noted that for more than a decade there has been little reduction in the poverty rate among blacks, that the ratio of black to white median family income has stagnated, and that, since the mid-1950s, the unemployment rate of blacks has been double that of whites.² In the words of Senator Moynihan, "... the decade of the 1970s was the first in which as a group, black Americans, with respect to white Americans, were better off at the beginning than at the end."³

This controversy reflects the problems which arise when analysts measure racial progress. We have an extensive statistical system which generates hundreds of indicators of the status of blacks. The development of improved statistical models helps us assess the net effects of race on earnings, occupational achievement, and poverty. In addition to the

indexes from the federal statistical agencies, there are measures of the attitudes of blacks, such as their beliefs about racial change, their feelings of alienation, and their perceptions of whites' support for or opposition to equal opportunity programs.⁴

There is, however, no consensus about which are the most important measures or how different indicators should be weighted to reach a judgment about whether racial gaps are narrowing or growing larger. This dilemma comes about because there are two fundamentally different models of this nation's social structure.

America as a Melting Pot. Many social science theories and empirical investigations stress the assimilation process which incorporated Europeans, Asians, and Latin American immigrants. Presumably these groups entered the United States in an impoverished status, were concentrated in urban slums, and were the targets of discrimination. In the course of several generations, they took advantage of opportunities—especially educational opportunities—and prospered.

An elaboration of this model stresses that blacks were once singled out for unusually harsh treatment but places greater weight upon the removal of those barriers which formerly excluded them from white society. Court decisions in the post-World War II era encompassing civil rights laws, as well as the sustained growth of the economy, permitted blacks to compete equitably. Advocates of this model will point to those many measures which show rapid declines in black-white differences.

America as a Polarized Society. A different model sees this country as riven by racial, ethnic, and economic class issues. Gains for any one group are made at the expense of another. Powerful groups seek to retain their economic advantage and pass it on to their offspring. Hostility and discrimination have been useful for this purpose, so the nation has a history both of laws which favor one group over another and of conflicts over who controls jobs and neighborhoods.

From the earliest days of the colonial era, laws and common customs mandated special treatment for blacks because of their supposed racial inferiority and their unique economic niche. Advocates of this model doubt that great change occurred after World War II and are skeptical about the removal of those barriers which kept blacks out of the economic mainstream. They emphasize indicators which show little racial change.

It is impossible to gauge black progress by examining just one indicator, even such an important measure as the earnings of men. To understand the extent of racial change, it is necessary to analyze the aims, accomplishments, and failures of the civil rights movement. Its aims have been broader than just wage rates. Since the late nineteenth century, this movement has sought racial equity in five areas of public life: voting and citizenship rights, public accommodations, housing, education, and employment.

Voting Rights and Rights to Equal Opportunities in Public Places

These are two important areas in which racial barriers have been effectively removed. The Fourteenth and Fifteenth Amendments seemingly guaranteed blacks their voting privileges, but for a seven-decade span these rights were denied in southern states. A major goal of the civil rights movement was to permit blacks to influence the electoral process in the same manner as whites. Most important in this regard was the Voting Rights Act of 1965.

Since the early 1960s, the proportion of southern blacks casting ballots has increased sharply.⁵ Although racial differences in voting remain large, even after the effects of factors influencing turnout such as education and place of residence are taken into account,⁶ no one contends that this results primarily from the systematic abridgement of voting rights.

The Civil Rights Act of 1875 outlawed racial segregation in public accommodations, but by the turn of the century Jim Crow laws in southern states called for such segregation in schools, public transportation, parks, and most other public places. In the North, common customs, business practices, and the policies of local governments produced a similar segregation of blacks from whites. Even after World War II, hotels and restaurants in northern cities often refused black clientele.⁷

There is a long history of sit-ins, protests, marches, and strikes designed to end this segregation. The Montgomery bus boycott and similar protests in dozens of other cities led to enactment of Title II of the Civil Rights Act of 1964, which proscribed such racial practices.⁸ Although a few cases arise each year in which a black is denied service in a restaurant, a hotel, or a barber shop, the blatantly discriminatory policies of the Jim Crow era have ended. By the late 1960s, blacks in all regions could use the same public accommodations as whites.

Residential Segregation and the Quality of Housing for Blacks

In most metropolitan areas, *de facto* racial segregation persisted long after the laws were changed. As a result, shopping areas, parks, hospitals, restaurants, and transit lines are thoroughly coded by color. Racial residential segregation is a development of the late nineteenth and early twentieth centuries.⁹ When blacks first came to live in cities in large numbers, municipal authorities passed laws to guarantee that whites would not live next to blacks. Courts often overturned such ordinances on the grounds that they infringed upon property rights, but private practices, such as restrictive covenants and government policies, segregated blacks from whites.¹⁰ Supreme Court decisions and local open-housing ordinances supported the right of blacks to live where they could afford, but the major change was the Fair Housing Act of 1968, which outlawed racial discrimination in the sale or rental of most housing units.

Its proponents believed that this law would reduce the traditional geographic isolation of blacks in American metropolises. Although there were some declines in residential isolation, the separation of blacks from whites did not end in the 1970s.¹¹ In areas which have large black populations, there are many central city neighborhoods and a few in the suburbs which are either all-black or well along to becoming exclusively black enclaves. Most other neighborhoods have no more than token black populations. Studies of residential patterns in 1980 revealed that blacks are very different from other minority or ethnic groups in this respect. In particular, they are much more segregated from whites than are two more newly arrived groups: Asians and Hispanics.¹²

Table 1 presents indexes of residential segregation based upon census tract data for the nation's metropolitan areas of 2.5 million or more. This measure—the *index of dissimilarity*—takes on its maximum value of 100 when all census tracts are racially homogeneous.⁹ It would have a value

TABLE 1. Measures of Residential Segregation in 1980 for Metropolitan Areas of 2,500,000 or More

Metropolitan Area	Population in Millions	Percent Black	Residential Segregation Indexes* Comparing Non-Hispanic Whites to Three Groups		
			Blacks	Hispanics	Asians
New York	9.120	21	81	65	49
Los Angeles-Long Beach	7.477	13	81	57	47
Chicago	7.104	20	88	64	46
Philadelphia	4.717	19	79	63	47
Detroit	4.353	21	88	45	48
San Francisco-Oakland	3.251	12	72	41	47
Washington	3.061	28	70	32	31
Dallas-Ft. Worth	2.975	14	79	49	43
Houston	2.905	18	75	49	45
Boston	2.763	6	77	57	51
Nassau-Suffolk	2.606	6	77	36	40
Average	4.576	16	79	51	45

*These indexes of dissimilarity were calculated from census tract data. Hispanics may be of any race.

Source: U.S. Bureau of the Census, *Census of Population: 1980*, PC80-A-B1, Table 69; *Census of Population and Housing: 1980*, Summary Tape File 3A.

close to zero if two groups were randomly distributed across a metropolis.

In metropolitan New York, the segregation score comparing blacks and non-Hispanic whites was 81, while that comparing Hispanics to non-Hispanic whites was only 65. The residential segregation of Asians from whites in New York was much less, an index of 49. In Washington, the index of black to non-Hispanic white residential segregation was 70, or more than double the level of segregation of Hispanics and Asians from non-Hispanic whites. Additional studies demonstrate that blacks at all economic statuses are highly segregated from whites of the identical economic level.¹³ The Fair Housing Act of 1968 produced much less change in the status of black Americans than did the Voting Rights Act of 1965.

A major effort of civil rights organizations has been the upgrading of housing quality for blacks. Forty years ago, many blacks lived in dilapidated rural housing or in urban slums, often in units which lacked the basic plumbing and kitchen facilities we take for granted; and almost one-half of the black-occupied units in 1950 lacked an indoor flush toilet.¹⁴ The movement of blacks to cities, urban renewal projects of the 1950s and 1960s, new federal housing programs, and improvements in the economic status of blacks led to great changes in the quality of housing. By 1980, only 6 percent of the homes and apartments occupied by blacks lacked complete plumbing facilities.¹⁵ Unlike the modest changes in residential segregation, racial differences in housing quality have been greatly reduced.

Equal Opportunities in Education

Litigation to provide equal opportunities in public schools predates the Civil War, and throughout this century civil rights leaders continued efforts to bring this about.¹⁶ One set of efforts sought equal facilities for black students and equal pay for black teachers. Another sought racial parity in amounts of education. Finally, a major aim of the civil rights movement was the actual integration of public schools, an achievement which would seem to guarantee that black and white children receive identical educations. Supreme Court

decisions in the post-World War II era—especially those which called for the use of busing and racial ratios—are important with regard to educational equity.¹⁷ In terms of measurable aspects of school facilities such as age of the building, presence of libraries or laboratories, extracurricular activities, degrees of teachers, and their salaries, black students approached parity with whites in the 1960s.¹⁸ There is no evidence that black children now attend public schools which are less well-equipped or have less well-paid teachers than white children in the same area.

In addition, we are nearing a time when the years of schooling completed by blacks and whites will be the same. Chart 1 shows the average years completed by black and white men and women when they reached ages 25 to 29. In 1940, young blacks averaged about three fewer years of attainment than whites. By the 1970s, racial differences in enrollment rates through the teen years were eliminated, and, despite claims to the contrary, the long-term trends suggest a racial convergence in college enrollment.¹⁹ We have not yet reached educational parity, but, unless there is a reversal of established trends, young blacks and whites will differ little in the number of years they attend school.

Racial differences in scores on tests of intellectual skills and learning have been large. For twenty years, innovative programs such as Head Start sought to improve the educational achievements of children and reduce racial differences. The National Assessment of Educational Progress, which measures the skills of national samples of students, found that there were modest declines in black-white differences on tests of reading, writing, mathematics, science, and social studies.²⁰ Although differences remain large, the 1970s were years in which there was some convergence, not only of the enrollment rates of blacks and whites but also of their test scores.

In the 1954 *Brown* decision, the Supreme Court unanimously declared that racially segregated schools were inherently unequal and that the state-imposed separation of black children marked them as inferior. Did this ruling and the many activities of civil rights groups lead to the integration of schools?

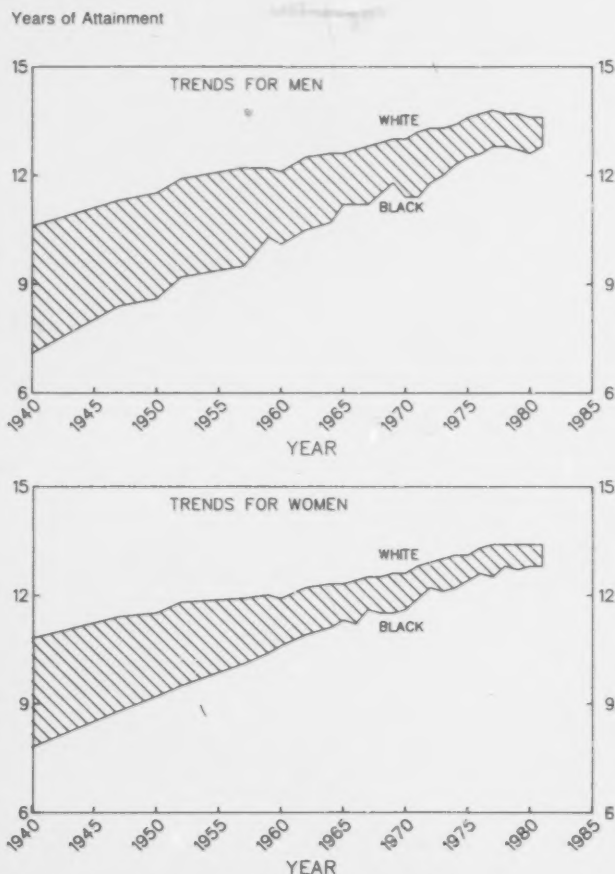
In small and medium-sized cities throughout the country, public schools are generally integrated. The gains in the South have been impressive because the federal courts in that region ordered a thorough mixing of students and teachers.²¹

The situation in the largest metropolitan areas is very different. Thirty years ago schools in southern cities were segregated because of state laws and, in the North, because of residential segregation. However, school districts enrolled both blacks and whites, so integration could be accomplished by transferring students within the districts. Today, public schools are segregated, in large part, because blacks and whites live in separate districts: in most large central cities,

the public schools enroll few whites but many blacks and Hispanics. In 1980, three-quarters of the nation's public school students were non-Hispanic whites,²² but in Washington, D.C., only 4 percent were non-Hispanic whites; in Atlanta, 8 percent; in New Orleans, Detroit and San Antonio, 12 percent.²¹ Only three of the 25 largest central city school districts had a majority white enrollment in 1980.

Within these metropolises, white students are in the suburban ring or attend private or parochial schools. Unless policies which separate city and suburban students into different school districts are altered, the persistence of residential segregation will combine with demographic trends to produce public schools which are almost as segregated as those permitted before 1954.

CHART 1. Average Educational Attainment of Persons 25 to 29, by Race and Sex, 1940 to 1981*



*Data for years prior to 1967 refer to whites and nonwhites.
Source: U.S. Bureau of the Census, *Census of Population: 1950*, P-C1, Table 115; *Census of Population: 1960*, PC(1)-1D, Table 173; *Current Population Reports*, Series P-20, Nos. 15, 77, 121, 138, 158, 169, 182, 194, 207, 229, 243, 274, 295, 314, and 390.

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Actual and Projected Economic Indicators

seasonally adjusted

SERIES FORECAST BY THE ASA-NBER PANEL															
ECONOMIC INDICATOR	Quarterly Data												Annual Data		
	Actual						Projected						Act'l.	Projected	
	84:4	85:1	85:2	85:3	85:4	86:1	86:2	86:3	86:4	87:1	87:2	1985			
GROSS NATIONAL PRODUCT*	3,846	3,909	3,965	4,031	4,088	4,149	4,180	4,196	4,270	4,347	4,419	4,485	3,998	4,242	4,525
GNP IMPLICIT PRICE DEFLATOR* (index, 1982 = 100)	109.2	110.2	111.1	111.8	112.8	113.5	114.2	114.8	114.8	115.7	116.6	117.6	111.5	114.5	118.2
CORPORATE PROFITS AFTER TAXES*	140.6	136.6	126.7	133.4	139.4	135.2	140.8	145.5	150.5	155.3	158.9	159.0	131.4	149.0	160.9
UNEMPLOYMENT RATE (percent)	7.23	7.33	7.30	7.17	7.00	7.07	7.17	7.00	6.90	6.80	6.70	6.70	7.20	6.90	6.75
INDUSTRIAL PRODUCTION (index, 1977 = 100)	123.1	123.8	124.2	124.8	125.4	125.6	124.7	126.0	127.0	129.0	130.0	130.0	124.5	127.0	131.0
NEW PRIVATE HOUSING UNITS STARTED (millions)	1.613	1.762	1.743	1.688	1.773	1.998	1.908	2.000	1.980	1.925	1.900	1.800	1.741	1.973	1.835
CONSUMER PRICE INDEX (annualized percent change from prior quarter or year)	3.68	3.21	4.05	2.56	4.32	1.44	-1.66	-0.61	2.60	3.37	3.70	3.95	3.54	2.00	3.30
3-MONTH TREASURY BILL RATE (percent)	8.97	8.18	7.52	7.10	7.15	6.89	6.13	6.15	6.10	6.15	6.30	6.52	7.49	6.33	6.64
NEW HIGH-GRADE CORPORATE BOND YIELD (percent)	12.63	12.57	11.88	11.52	11.04	9.68	NA	8.80	8.84	9.00	9.30	9.55	11.75	9.07	9.40
GNP IN 1982 DOLLARS*	3,520	3,547	3,568	3,604	3,622	3,656	3,662	3,677	3,710	3,746	3,779	3,811	3,585	3,698	3,825
PERSONAL CONSUMPTION EXPENDITURES (1982 dollars)*	2,272	2,292	2,312	2,342	2,352	2,373	2,410	2,398	2,415	2,428	2,445	2,464	2,324	2,407	2,474
NONRESIDENTIAL FIXED INVESTMENT (1982 dollars)*	447.6	442.7	463.0	463.1	476.9	457.8	455.2	476.0	480.0	485.1	486.1	485.6	461.4	478.5	488.6
RESIDENTIAL FIXED INVESTMENT (1982 dollars)*	168.3	172.4	175.1	180.0	181.5	186.3	192.3	185.2	188.3	191.7	191.9	191.8	177.3	186.8	191.7
CHANGE IN BUSINESS INVENTORIES (1982 dollars)*	33.9	23.2	17.4	0.7	-5.2	39.9	11.6	16.2	13.2	16.2	20.2	21.2	9.0	19.2	21.5
NET EXPORTS (1982 dollars)*	-92.7	-78.8	-108	-114	-132	-126	-150	-119	-110	-103	-100	-100	-108	-114	-95.0
FEDERAL GOVERNMENT PURCHASES (1982 dollars)*	303.8	305.8	311.4	329.9	347.2	320.4	329.5	321.6	323.6	326.6	328.4	330.1	323.6	323.0	331.4
STATE AND LOCAL GOVERNMENT PURCHASES (1982 dollars)*	387.7	389.5	396.9	401.9	402.2	404.8	413.0	404.8	407.0	408.9	410.9	413.9	397.6	405.8	414.4
SERIES FROM THE CURRENT-DOLLAR GNP ACCOUNTS															
ECONOMIC INDICATOR	Quarterly Data											Annual Data			
	83:3	84:4	84:1	84:2	84:3	84:4	85:1	85:2	85:3	85:4	86:1	86:2	1983	1984	1985
GROSS NATIONAL PRODUCT*	3,444	3,546	3,671	3,744	3,800	3,846	3,909	3,965	4,031	4,088	4,149	4,180	3,406	3,765	3,998
PERSONAL CONSUMPTION EXPENDITURES*	2,263	2,316	2,364	2,416	2,446	2,487	2,531	2,576	2,627	2,668	2,698	2,735	2,235	2,428	2,600
GROSS PRIVATE DOMESTIC INVESTMENT*	519.7	579.8	659.5	657.5	670.3	661.1	650.6	667.1	657.4	669.5	708.3	684.7	502.3	662.1	661.1
NET EXPORTS*	-19.3	-25.8	-45.6	-63.2	-60.0	-66.1	-49.4	-77.1	-83.7	-105	-93.7	-100	-6.1	-58.7	-78.9
GOVERNMENT PURCHASES*	680.7	676.1	693.2	733.3	743.8	763.4	777.3	799.0	829.7	855.6	836.7	860.0	675.0	733.4	815.4
DISPOSABLE PERSONAL INCOME*	2,443	2,528	2,613	2,646	2,694	2,730	2,755	2,842	2,832	2,882	2,935	2,982	2,428	2,671	2,828
PERSONAL SAVING RATE* (percent of disposable income)	4.8	5.8	6.9	6.0	6.4	6.0	5.2	6.5	4.2	4.4	5.0	5.1	5.4	6.3	5.1

Note: (1) All data are at annual rates and in billions of current dollars unless otherwise indicated. (2) To facilitate comparison and evaluation of forecasts, both actual data, released in late August, and projected data, released by ASA-NBER in June, are displayed for second quarter 1986.

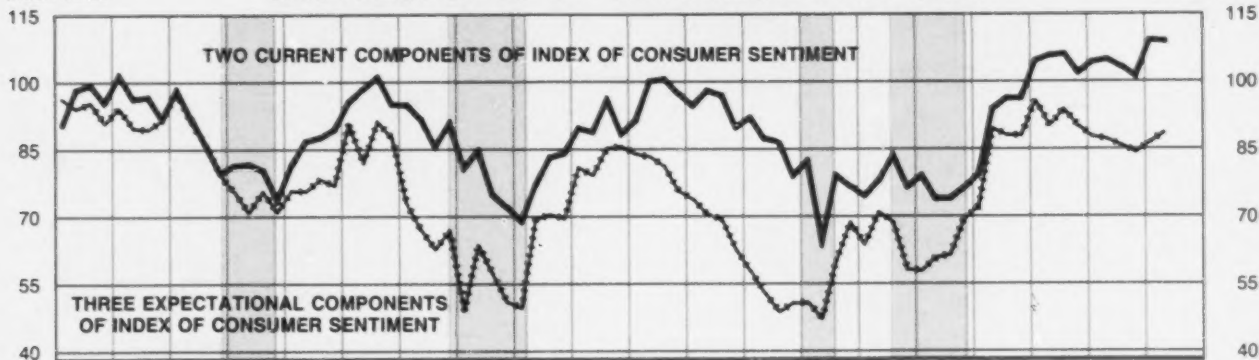
Sources: Projections: American Statistical Association—National Bureau of Economic Research panel of forecasters.
Actual Data: U.S. Departments of Commerce and Labor, Board of Governors of the Federal Reserve System.

*Substantial revision of the data for variables marked with an asterisk has occurred since the last printing.

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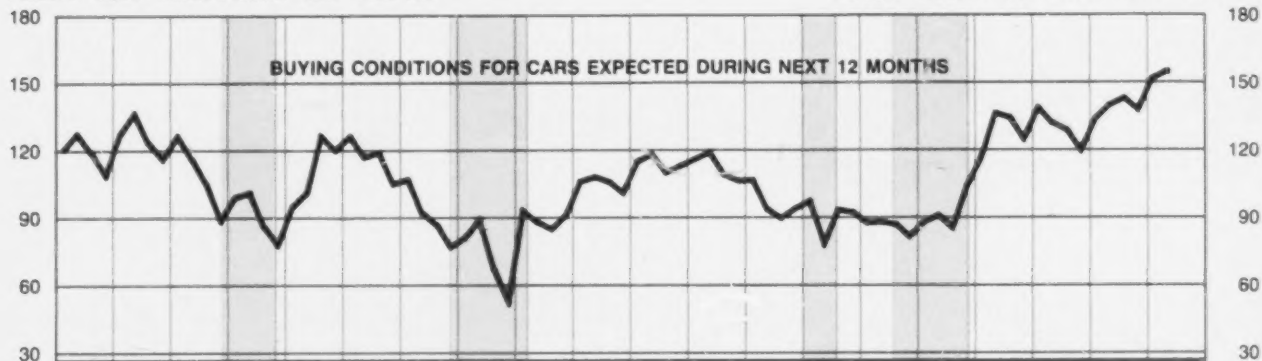
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Index Value



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Percent "Good" Minus Percent "Bad" Plus 100

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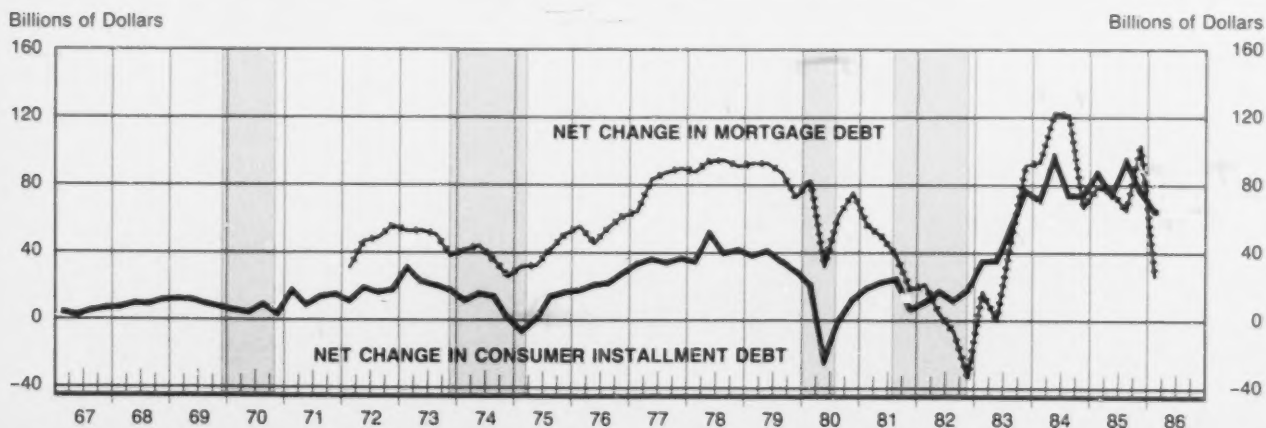
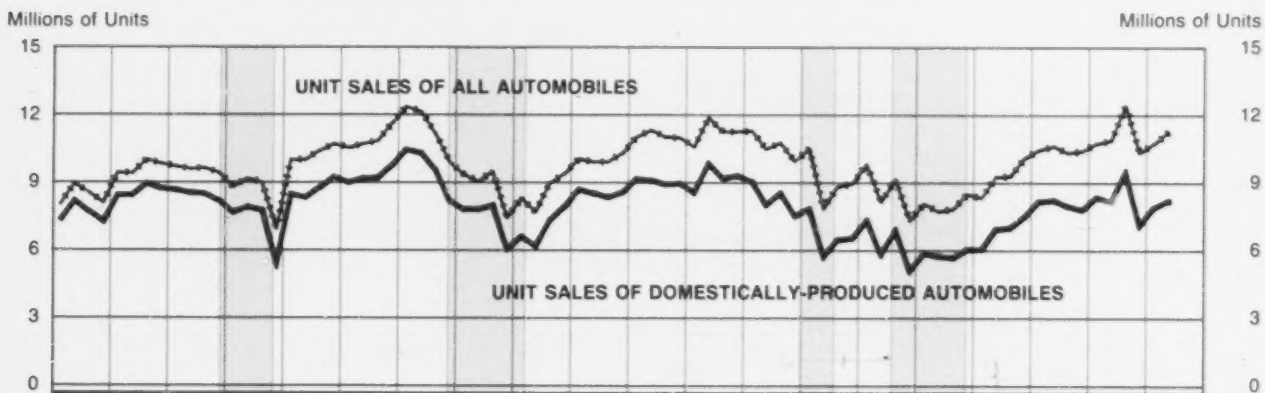
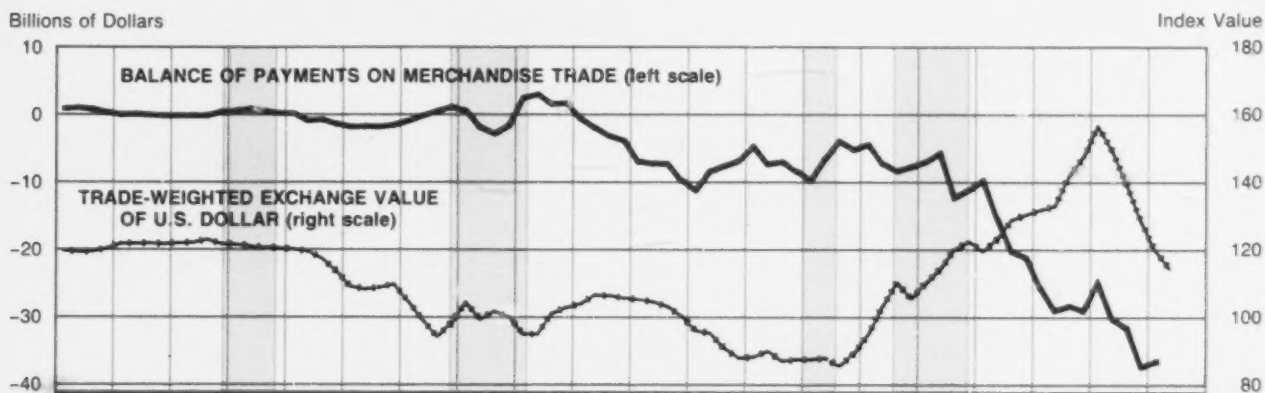
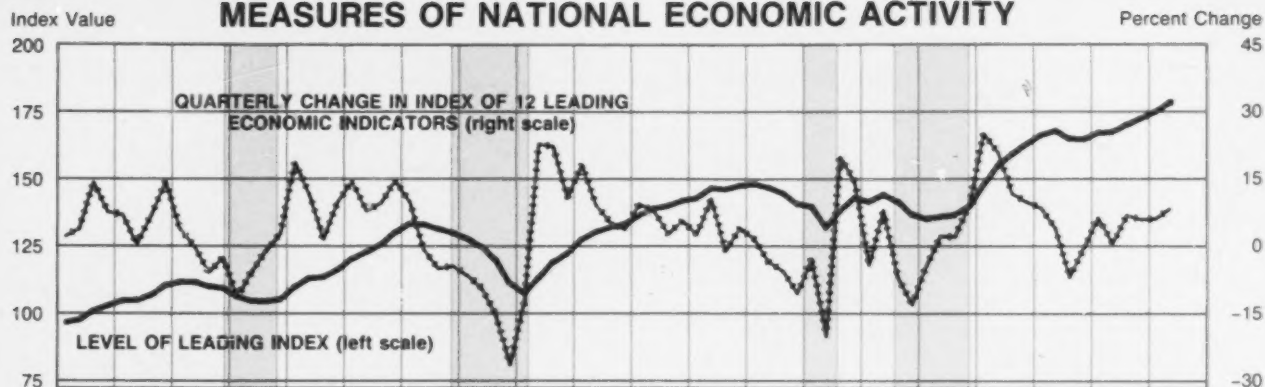
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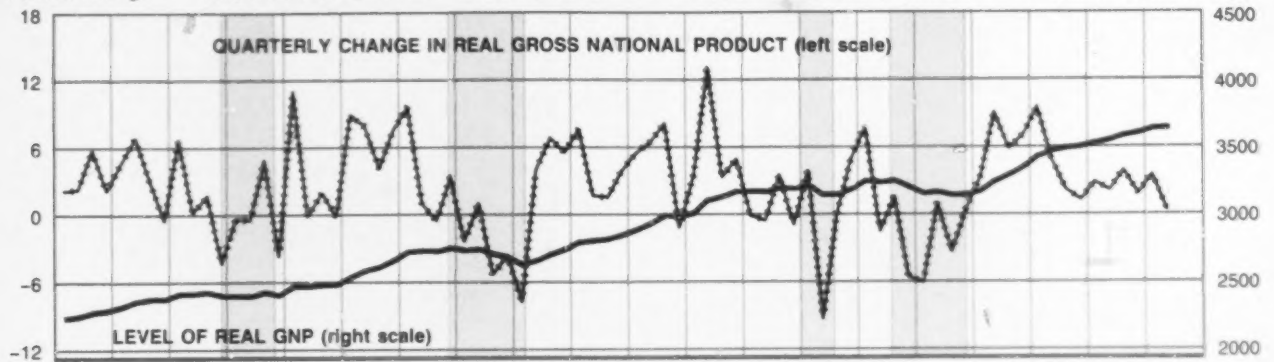


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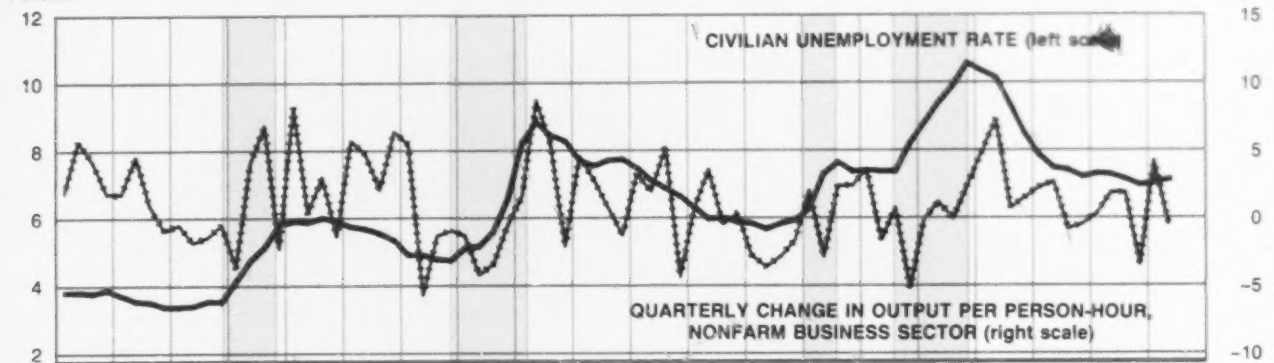
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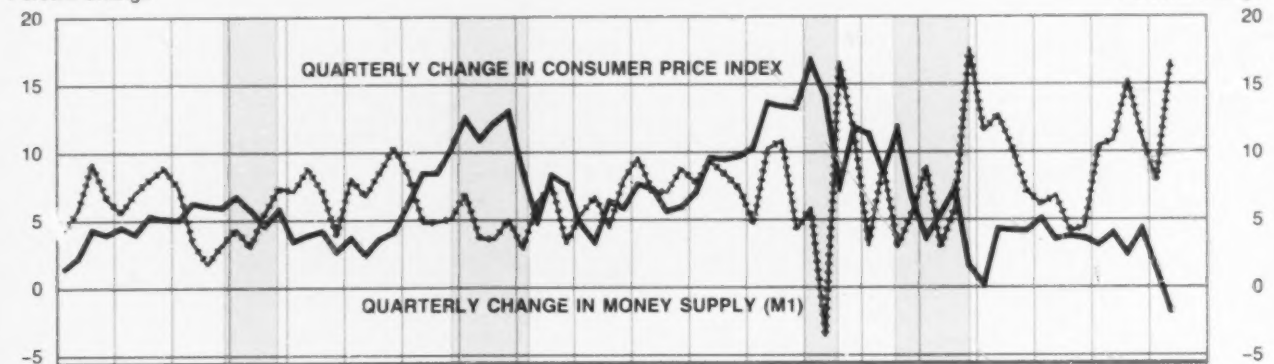
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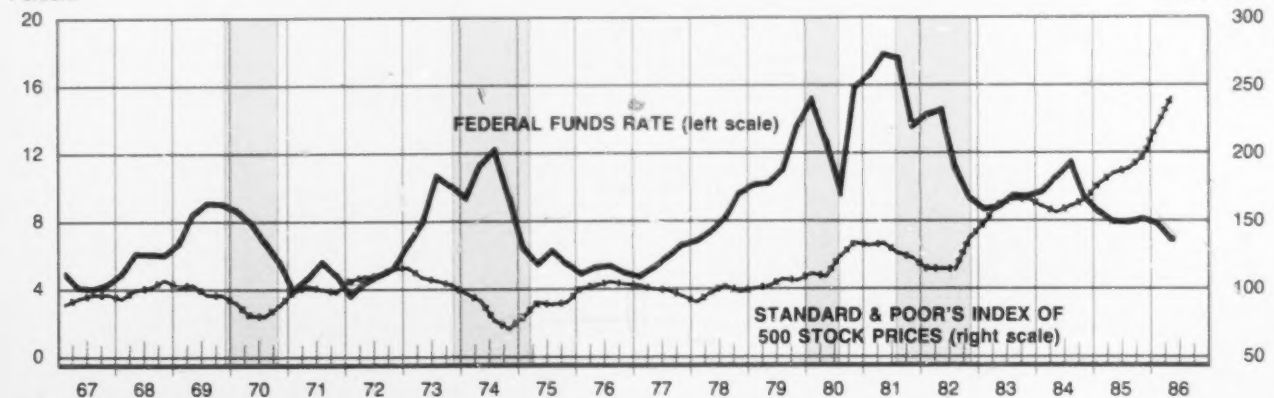
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